

28 ✓
/INDIVIDUAL AND GROUP GENDER: MODERATORS FOR
ATTRIBUTIONS, PERCEPTIONS, AND OPINIONS/

by

GUY CHARLES BALTZELLE

B. S., University of Washington, 1980

A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Psychology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1985

Approved by:


Major Professor

LD
2668
.78
1985
8348
C.2

TABLE OF CONTENTS

111202 742144

i

	Page
Acknowledgments	v
List of Tables	vi
Introduction	1
Previous Research on Sex-role Stereotypes	1
Attributions for Task Outcome	1
Attributions and Opinions	5
Discounting and Augmentation Principles	5
Knowledge Bias, Reporting Bias, and Veridicality	7
Effects of Benefiting/Suffering on Attributions	8
Combining Two Paradigms	10
Proposed Research	11
Hypothesis 1	15
Hypothesis 2	16
Study I	16
Method	16
Subjects	16
Task	16
Manipulations	17
Group Gender	17
Focal Person Gender	17
Decision Consequences	17
Dependent Variables	18
Attributions	18
Perceptions of the Focal Person	19
Opinions	20

Analyses	20
Pilot Tests	20
'Hire from Outside' vs 'Promote from Within'	20
Decision Consequences vs Correct/Incorrect	22
Results	27
Manipulation Checks	27
Attributions	29
Perceptions of the Focal Person	30
Observers' Opinions	39
Regression Analysis	47
The Influence of Perceived Correctness	51
Attribution	52
Perceptions of the Focal Person	53
Opinions	57
Discussion	57
Study II	62
Method	62
Subjects	62
Task	63
Manipulations	63
Dependent Variables	64
Analysis	66
Results	66
Manipulation Checks	66
Attributions	67

Perceptions of the Focal Person	67
Opinions	73
Discussion--Study II	74
General Discussion	75
The Attributions/Perceptions->Opinions Causal Chain . .	77
Gender and Sex Role	79
External Validity	82
Future Research	83
References	85
Appendices	
Appendix A: Focal Person Argues 'Hire from Outside' and Experiences Positive Consequences . . .	90
Appendix B: Focal Person Argues 'Promote from Within' and Experiences Negative Consequences . . .	93
Appendix C: Attribution Scale	96
Appendix D: Perceptions of the Focal Person Scale . . .	97
Appendix E: Opinion Scale	98
Appendix F: Decision Consequences Manipulation Check and Correctness Scale	99
Appendix G: Study II: Focal Person Experiences Negative Consequences	100

ACKNOWLEDGMENTS

I would like to express my sincere gratitude and appreciation to my major Professor, Dr. Patrick A. Knight, for the time, attention, and knowledge he provided for this thesis. I would further like to thank my committee members, Dr. Frank Saal and Dr. Jerome Frieman for the insight they provided. The moral support, advice, and friendship found among the graduate students made it all possible. And, of course, thanks to Janis for always being there.

LIST OF TABLES

Page

1. Reliability of Perceptions of the Focal Person	
Measures	21
2. Means and Standard Deviations of Argument	
Strength and Argument Preference for Each	
Argument Condition	23
3. Means and Standard Deviations of Argument	
Strength for Each Argument Condition and	
Each Decision Consequence Condition	25
4. Means and Standard Deviations of Argument	
Preference for Each Argument Condition and	
Each Decision Consequence Decision	26
5. Means and Standard Deviations of Perceived	
Benefiting, Suffering, Correctness for	
Decision Consequence Conditions	28
6. Means and Standard Deviations of Decision	
Consequences X Group Gender X Focal Person	
Interaction, Dependent Measure: Attribution	31
7. Means and Standard Deviations of Decision	
Consequences X Group Gender X Focal Person	
Interaction; Dependent Measure: Honesty	33
8. Means and Standard Deviations of Decision	
Consequences X Group Gender X Focal Person	
Interaction; Dependent Measure: Bias	34
9. Means and Standard Deviations of Decision	
Consequences X Group Gender X Focal Person	
Interaction; Dependent Measure: Independence	35

10. Means and Standard Deviations of Decision Consequences X Group Gender X Focal Person Interaction; Dependent Measure: Trust	36
11. Means and Standard Deviations of Decision Consequences X Group Gender X Focal Person Interaction; Dependent Measure: Objectivity	37
12. Means and Standard Deviations of Decision Consequences X Group Gender X Focal Person Interaction; Dependent Measure: Commitment	38
13. Means and Standard Deviations of Decision Consequences X Group Gender X Focal Person Interaction; Dependent Measure: Opportunism	40
14. Means and Standard Deviations of Decision Consequences and Group Gender Main Effects; Dependent Measure: Objectivity	41
15. Main Effects of Decision Consequences on Subjects' Opinions	42
16. Correlations between Subjects' Opinions and Perception Measures	44
17. Means and Standard Deviations of Decision Consequences X Group Gender X Focal Person Gender Interaction; Dependent Measure: Subjects' Opinions . .	45
18. Means and Standard Deviations of Focal Person Gender X Group Gender Interaction; Dependent Variable: Subjects' Opinions	46

19. Increase in R^2 When Each Attribution and Perception Variable Was Added to Decision Consequence--Subjects' Opinions Equation	49
20. Increase in R^2 When Decision Consequences Was Added to Each Attribution or Perception--Subjects' Opinions Equation	50
21. Increase in R^2 When Correctness Measure Was Added to Each Decision Consequence--Attribution or Perception Equation	54
22. Increase in R^2 When Decision Consequences Was Added to Each Correctness--Attribution or Perception Equation	55
23. Change in R^2 When Each Correctness Regression Cross-Validation	56
24. Study II: Reliability of Perceptions of the Focal Person Measures	65
25. Study II: Means and Standard Deviations of T tests Between Decision Consequences Conditions; Dependent Variables: Attribution and Perception Measures	69
26. Study II: Increase in R^2 When Correctness Measure Was Added to Each Decision Consequences/Attribution or Perception Equation	70
27. Study II: Increase in R^2 When Decision Consequences Was Added to Each Correctness--Attribution or Perception Equation	71
28. Study II: Change in R^2 When Each Correctness Regression Cross-Validated	72

Individual and Group Gender: Moderators for Attributions, Perceptions, and Opinions

The percentage of women who make up the white collar labor force has steadily increased. In the last decade alone, the percentage of management positions held by women has jumped from 17.6% to 27.5% (U.S. Bureau of Labor Statistics, 1983). This movement of women into management has made more critical than ever the need to investigate the perceptions that both men and women hold about women in the business environment. In her recent evaluation of the research literature on gender, Deaux (1984) concluded that although research has shown that gender stereotypes are pervasive, they are not an end in themselves. She stated that current research should be directed toward "more active interaction sequences, toward the processes through which gender information is processed and acted upon" (p. 113). This is the area that the present study was designed to investigate. This study examines the manner in which people react to leadership behavior as displayed by both men and women in a management context.

Previous Research on Sex-role Stereotyping

Attributions for Task Outcome. Much of the research in the area of sex-role stereotyping is based on a model originally outlined by Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1972) to explain the differences found in attributions for task outcomes. As applied to gender research, the theory states that observers have certain expectations for performance based on commonly held stereotypes of men and women. Causal attributions

that observers make for the performance of males and females are linked to these expectations. Differential expectations therefore lead to differential attributions, even when the outcome is the same. Attributions to stable, internal causes are made when outcomes match expectancies, and attributions to unstable causes are made when outcomes do not match expectancies. The theory therefore predicts that if stereotypes lead to the expectation that women will not succeed at a male sex-typed task, then when women do in fact succeed, the outcome will be attributed to unstable causes such as extra effort, or luck. Conversely, if the expectancy for men is that they will succeed at masculine tasks, their success will be attributed to the stable, internal cause of ability.

Sex-role stereotyping was shown to occur in laboratory and organizational settings in a series of studies by Rosen and Jerdee, (1973, 1974a, 1974b, 1974c, 1975). Using both college students and business executives as subjects, these researchers performed a series of in-basket experiments in which they demonstrated that sex-role stereotyping may occur in such organizational processes as employment selection (Rosen and Jerdee, 1974c, 1975), placement (Rosen and Jerdee, 1974a, 1974b, 1974c), disciplinary decisions (Rosen and Jerdee, 1974c), and preferences for supervisory behaviors (Rosen and Jerdee, 1973, 1974b, 1974c). For example, in one experiment (Rosen and Jerdee, 1974c) bank executives were asked to make promotion, employee development, and supervisory decisions about subordinates based on in-basket information. The subjects were shown descriptions of individuals, with names having been

changed in order to vary gender. The researchers found that when these "paper people" were male, executives made decisions that were more favorable to the subordinates than when they were female. Rosen and Jerdee concluded that discrimination against women in organizational decision-making was a pervasive problem.

In research along similar lines, Schein (1973, 1975) developed descriptive indexes consisting of 92 adjectives and descriptive terms that differentially described men and women. Subjects were asked to check off items describing women in general, men in general, or successful managers. She found that successful middle managers were perceived as possessing characteristics, attitudes, and temperaments that are more commonly ascribed to men in general than to women in general. Her results were obtained from samples of both male and female managers. She concluded that "acceptance of stereotypical male characteristics as a basis for success in management may be a necessity for the woman seeking to achieve in the [then] current organizational climate" (p. 343, 1975).

The fact that business tasks are generally viewed as masculine raises questions about the experiences of female managers. One conclusion is certain: All else equal, the performance of women in business tasks is not perceived in the same way as the performance of men.

It has been shown that when women succeed in business tasks their success may be attributed to unstable factors such as extra effort (Deaux & Taynor, 1973; Taynor & Deaux, 1975; Feldman-Summers and Keisler, 1974; Reno, 1981), or luck (Deaux & Emswiller, 1974; Feather & Simon, 1975; Cash, Gillen, & Brown,

1977; Reno, 1981). Men's success is typically attributed to relatively stable ability factors (Deaux & Emswiller, 1974; Feather & Simon, 1975; Taynor & Deaux, 1975; Cash, Gillen, & Burns, 1977). Taynor and Deaux (1975) suggested that this is due to stereotypes and biases that people hold about the relative ability of men and women in various occupational roles. It has been shown that there is a general devaluation of women and feminine-typed roles, while masculine roles are generally viewed as being both more difficult and more attractive (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). Consistent with this, Schein (1973, 1975) found that women were perceived as being less competent in masculine roles than were men. If a woman does manage to succeed at a masculine sex-typed task then her success is attributed to luck and/or effort (e.g., Deaux & Taynor, 1973; Deaux & Emswiller, 1974). In fact, some research (Feather & Simon, 1975) indicates that women, especially when being evaluated by other women, can gain more approval by failing at a masculine-typed task, presumably because failure on such tasks is more consistent with the feminine sex-role.

These findings suggest that sex-role stereotyping may be taking place in industry. The sex-role of managers is viewed as masculine and women in management positions are therefore viewed as acting outside of their sex-role. The present study will test the hypothesis that in a managerial role, the gender of the actor acts as a moderator for both attributions made by observers and the resulting influence of the actor on observers' opinions.

Attributions for Opinions

Discounting and Augmentation Principles. Attribution processes have been studied extensively by psychologists (Harvey, Ickes, & Kidd, 1976; Harvey & Weary, 1984). Attribution theory seeks to explain how people make causal attributions; that is, how they decide why events happen. In particular, the theory deals with human behavior and the attributions that naive observers make in order to explain why others behave in a particular manner or why they hold certain opinions. For the current research, the subject of interest is the attributions that observers make for the opinions of others.

Kelley (1973) hypothesized that individuals, when exposed to the opinion of another, engage in a causal analysis of the opinion, relying on whatever information is available to them. Kelley theorized that this processing of information is guided by two basic dynamics: the discounting principle and the augmentation principle. The discounting principle states that when there are many possible causes that can be used to explain a given outcome (e.g., opinion), the role of any one particular cause in producing the outcome is discounted in the attribution process. Augmentation is the converse of discounting: If there are few possible causes to explain a given outcome, then the perceived efficacy of one particular cause in producing the outcome is enhanced or augmented.

In this case the outcome under consideration is the actor's belief statements (e.g., "I believe we should hire a supervisor from outside the organization."). We are interested in the explanations that observers give for a communicator's position

on an issue. Thus, if there are compelling and/or a large number of external or situational explanations (e.g., material reward) available for the actor's belief statements, an observer will be less likely to attribute the statements to internal or dispositional factors (e.g., personal beliefs). Thus, the observer would "discount" internal factors in making the attribution. Complementing this, if there are few internal explanations available, an observer will be more likely to utilize external explanations for the actor's opinion. Thus, external factors are "augmented" in the observer's eyes. Combining these principles, if there is evidence that the communicator may receive rewards or other personal benefits as a result of stating an opinion, especially if there is a lack of evidence that he or she has personal or dispositional reasons, then the opinion will likely be regarded by observers as being insincere and lacking honesty.

Conversely, if there are few external explanations available for the actor's beliefs, the observer will be more likely to utilize internal explanations, while if there are many personal or dispositional explanations available, the observer will be less likely to make external or situational attributions. That is, if there is evidence that the communicator has personal or dispositional reasons for stating a particular belief, especially if there is no evidence that he or she may receive personal benefits or rewards, then an observer will be more likely to regard the opinions as being a sincere, honest expression of the actor's beliefs.

The discounting and augmentation principles work in tandem

as a "subjective analysis of variance" (Kelly, 1973). The assumption is that the average person is a "naive psychologist" and uses a naive version of the analysis of variance method. The concept is guided by the covariation principle, viz., "an effect is attributed to the one of its possible causes with which, over time, it covaries" (Kelly, p. 108). In the case of a stated opinion the naive observer will note, or make inferences about, whether dispositional or situational factors covary with the speaker's opinion. Attributions made by the observer for the speaker's opinion will be dependent on the results of this naive analysis of covariance.

Knowledge Bias, Reporting Bias, and Veridicality. Eagly and her associates (Eagly & Chaiken, 1975; Eagly, Wood, & Chaiken, 1978) expanded Kelley's original attributional analysis of persuasion to include the communicator's personal characteristics. Eagly described three causes to which a communicator's statements can be attributed. First, observers may attribute a communicator's statements to knowledge bias, or a belief that the communicator's knowledge of external reality is inaccurate. Second, observers may attribute the statements to reporting bias, or a belief that the communicator is not willing to portray an accurate version of reality. Third, if both knowledge bias and reporting bias can be eliminated as possible causes for the communicator's statements, observers will attribute the statement to external reality, or make a veridicality attribution. According to Eagly, only the last type of attribution will increase the level of communicator influence.

In order to substantiate their theory, Eagly, Wood, and Chaiken (1978) manipulated observers' perceptions of whether or not a male communicator used biased information and whether or not he changed his position on the issue for his audience. They found that when observers believed that the communicator used unbiased information and did not tailor his argument to his audience, he was viewed as less biased, less manipulative, and more sincere. Eagly et al. (1978) interpreted this as indicating that when the communicator displayed objectivity and accuracy about his message, internal motivations were attributed to him, and he was therefore viewed more favorably by observers.

Effects of Benefitting/Suffering on Attributions. In an experiment that was designed in part to test the hypothesis that people could actually reap benefits as a result of suffering, Knight and Weiss (1980) had subjects read one of three conditions of a bogus news article: the article stated that, as a result of taking a public stand on a political issue, a male actor either suffered, benefited, or no outcome was reported. Knight and Weiss found that observers made stronger internal attributions for the opinion of an actor who had suffered as a result of his opinion and stronger external attributions for a benefitting actor's opinion. They also found that the observers' perceptions of an actor's honesty, independence, and bias were all significantly more favorable when the actor suffered as a result of his opinion. Thus, the researchers suggested that the actor's benefitting/suffering mediated the relationship between the actors' communication and observers' perceptions.

As noted above, it has been found that when men succeed at a task, their success is attributed to internal causes such as skill (Deaux & Emswiller, 1974; Feather & Simon, 1975; Taynor & Deaux, 1975). Knight and Weiss' (1980) research indicates that there may be a mediator that affects attributions for performance. Specifically, if a person is seen as reaping personal benefits as a result of his or her opinion, then that person may be attributed with external, situational motivations without taking into account success or failure at the task (It should be noted that benefitting as the result of one's opinion is not equivalent to success at the task. The former refers to the personal result to the individual decision-maker, while the latter refers to the success or failure of the decision/task.

One might expect that if the observer views an actor as being more honest, independent, and unbiased, the observer would be more influenced by the actor's opinions. In fact, research has shown that communicator characteristics such as honesty, expertise (Hovland & Weiss, 1952; Walster, Aronson, & Abrahams, 1966) trustworthiness (Kelman & Hovland, 1953), independence, and lack of bias (Knight & Weiss, 1980) do have positive effects on communicator effectiveness. Knight and Weiss found that significantly more opinion change resulted when an actor suffered (and his honesty, independence, and bias were rated favorably) than when an actor benefited. Hierarchical regression analysis also suggested that the attribution and trait perceptions served as mediators between the actor's communication and his influence (Knight & Weiss, 1980).

Combining Two Paradigms

A major difference between the series of studies investigating gender differences (e.g. Deaux & Emswiller, 1974) and the series of studies investigating attributions for opinions (e.g. Knight & Weiss, 1980) is the type of information to which subjects were exposed. In the studies conducted by Deaux and her associates, the subjects were given information about the actor's success or failure at a task. In Knight and Weiss' (1980) research however, the cue was not success or failure, but whether the actor had benefited or suffered as a result of his opinions. These two manipulations represent very different circumstances. One situation (i.e., success/failure) provides information about the actor's objective performance on a task while the other situation (i.e., benefit/suffer) provides information about the personal consequences of the behavior to the actor without reference to success or failure. An example of the independence of these constructs would be a situation in which an actor is complimented or denigrated by another for his or her behavior without any reference to whether the behavior is effective or ineffective vis-a-vis the actor's goals.

A result of this difference in paradigms is that different models of attribution are relevant to explain the two phenomena. The line of research concerned with gender differences is best explained by a model outlined by Weiner et al. (1972) which is generally utilized as a model of attributions for task outcome. The line of research concerned with attributions for opinions best fits the model proposed by Kelley (1972). This is the model that will be used in the present study. Although the

research on gender differences is worded in terms of the task outcome model, it is still applicable to the present research and it can offer insights within the framework of Kelley's model.

Proposed Research

Managerial decision-making has long been a focus of research in psychology (Harrison, 1975; Pitz & Sachs, 1984). Group decision-making in a management context, specifically the consequences for a group that is unable to reach a consensus, is the focus of the current research. If the group does not reach a consensus, the dissenter(s) may be viewed positively or negatively depending on situational characteristics. If one individual reaches a different conclusion than the rest of the group and the person experiences a positive consequence (benefits) as a result of maintaining that position, then, based on the results of the Knight and Weiss (1980) study, it would be expected that he or she would be viewed as less honest, less independent, and more biased. It is hypothesized that this process would generally operate in management settings except under conditions where certain other factors have an impact. The two factors under consideration in the current study are the sex-role of the task and gender of the actors.

Knight and Weiss (1980) found that, when an actor suffered, observers made more internal attributions for his opinion, held more positive perceptions of him, and were more influenced by his opinion than when an actor benefitted. It is hypothesized that the same results will be found for men and women in the current study except during conditions in which gender is especially

salient. When one man disagrees with a group made up of women or one woman disagrees with a group made up of men, different results from the Knight & Weiss (1980) are predicted.

The first case concerns one man in a decision-making group made up of women. Typically, when an actor experiences positive consequences as a result of holding a particular position, it is hypothesized that he or she will be viewed more negatively by observers unless there is evidence available to indicate that the dissenter may have more authoritative knowledge than the rest of the group (Eagly, Wood, & Chaiken, 1975). Applying this to the issue of sex roles, if the majority of the group members are women and the individual who holds the differing opinion is a man, it is hypothesized that he will be viewed as having more authoritative knowledge than the women. Because people hold stereotypes and biases about traditional sex-roles, a man disagreeing with women should still be rated by observers as having stable, internal motivations, even if he received personal reward as a result of his opinion. The reason for this prediction is that management tasks are seen as being consistent with a masculine sex-role. The man, who is in his traditional sex-role, is disagreeing with women, who are not in their traditional sex-role. This perception on the part of observers should result in beliefs that the man is basing his opinion on reality, and should therefore decrease the probability of attribution to reporting bias. This type of veridicality attribution should outweigh the negative perceptions associated with the positive consequences; the result should be internal, stable attributions for his opinion.

In terms of Eagly's (Eagly & Chaiken, 1975; Eagly, Wood, & Chaiken, 1978) analysis, if a person experiences positive consequences as a result of an opinion, then an attribution of reporting bias would be more likely since the communicator would have something to gain by stating that opinion. In fact, that is what Knight and Weiss (1980) found. In the case of a man disagreeing with women however, it is expected that knowledge bias and reporting bias will be eliminated by subjects as possible causes for the actor's opinions by virtue of the fact that he is in his appropriate sex role. The actor's opinions will be attributed to reality as observers make a veridicality attribution. This in turn should increase the level of his influence on observers' opinions.

The second case in which results are predicted to differ from those found by Knight and Weiss (1980) is when one woman disagrees with a group made up of men. It is predicted that actors' gender and sex role should have a moderating effect on the attributions observers make for the actors' opinions. It is further predicted that the combination of gender and the masculine sex-role of management will affect the actors' ability to influence the opinions that observers hold on the issue being discussed. In the Knight and Weiss (1980) study it was found that, by virtue of strong internal attributions made by subjects, the suffering actor exerted more influence on subjects' opinions. Consequently, subjects were more disposed to agree with his view than they were when he benefited and was attributed with external motivations. This would be the expected result of such an interaction except when the masculine

sex role of management and the gender of the actors combine to prevent the necessary attributions.

As stated earlier, when observers attribute an opinion to stable, internal causes, they will be influenced by the actor's opinion unless there is an overriding reason to believe that the actor is in error. Returning to the group decision-making situation, if the group members are men and the individual holding the dissenting opinion is a woman, it is predicted that she will not be influential, even if she experiences negative consequences as a result of maintaining her opinions. Her gender is expected to moderate her influence over observers' opinions. Simply because she is seen as having strong convictions will not be enough to influence observers' opinions if they perceive that she is in a non-traditional sex-role and therefore lacks the expertise to identify the correct decision. She may suffer as a result of maintaining her opinion and be admired for doing so, but that will not change the observers' opinions that she could still be wrong.

In terms of Eagly's extension of the attribution model, there should be no attributions to reporting bias in the above situation, since there is no apparent motivation for the woman to misrepresent reality. Her opinions, however, will not be attributed to veridicality, either. Instead, it is predicted that her opinions will be attributed to knowledge bias. That is, her opinion will be attributed to dispositional motives, but her view of reality will be perceived by observers as inaccurate. This in turn should decrease her level of influence on observers' opinions. Consequently, even though observers

will make internal attributions for her opinions, they will not be influenced by them.

The group composition in the situation of one woman and a larger number of men has particular relevance to "real life." Although women are currently increasing their numbers in the ranks of management, they are still outnumbered by a ratio of three to one (U.S. Bureau of Labor Statistics, 1983). Consequently, it would not be uncommon for a woman to be the sole representative of her gender in a management situation.

Hypothesis 1: Focal person gender will moderate the effects of decision consequences and group gender on attributions, perceptions, and subject opinions. Specifically, positive consequences will result in situational attributions, negative perceptions, and relatively low influence over subjects' opinions except when the focal person is male and the other group members are female. In this case, there will be dispositional attributions, positive perceptions, and relatively high influence over subjects' opinions. Conversely, negative consequences will result in positive perceptions, dispositional attributions, and relatively high influence over subject opinions, except when the focal person is female and the other group members are male. In this case, there will be relatively little influence over subjects' opinions.

The proposed relationship between the factors that lead to influence is a causal chain. It is predicted that subjects will make attributions for opinions when they are stated by the

actors and subjects observe the consequences (positive or negative). They will also form perceptions about the characters of actors. The attributions and perceptions will in turn influence subjects' own opinions on the issue.

Hypothesis 2: Attributions and perceptions will mediate the relationship between outcome consequences and subjects' opinions.

No effects are predicted for subject gender since previous research has either failed to find any significant effects (Deaux & Emswiler, 1974; Deaux & Taynor, 1973; Rosen & Jerdee, 1974a, 1974b; Schein, 1973, 1975) or has found only very minor effects (Taynor & Deaux, 1975).

Study I

Method

Subjects

Subjects were 160 undergraduate students enrolled at Kansas State University; 98 (61%) were female and 62 (39%) were male. They received credit toward fulfilling general psychology requirements for their participation.

Task

Subjects read a transcript of a small group engaged in a management decision-making task, followed by a short description of the consequences of the group's decision. The issue in question was whether to replace a retiring supervisor by hiring a supervisor from outside the organization or by promoting an employee from within the organization. The decision-making

group consisted of four persons in all conditions. When the group reached a final decision, three of the members were in agreement and one individual (hereafter referred to as the focal person) arrived at a different opinion. When the final decision was presented to their supervisor, the focal person's opinion was presented with the group's decision as a minority position.

Manipulations

Group Gender. There were two conditions of group gender. In the first condition, the three members of the group who reached a consensus were male. In the second condition, the three members were female. Group gender was manipulated by changing the names of the group members on the transcript that subjects were given to read (e.g., Mark/Marcia, Carl/Carol).

Focal Person Gender. There were two conditions for the gender of the focal person who reached an independent decision. In the first condition, the focal person was male and in the second condition the focal person was female. Dissenter gender was manipulated by changing the name of the focal person on the transcript that subjects were given to read.

Decision Consequences. There were two conditions of consequences resulting from the decisions reached. For the condition in which the focal person experienced positive consequences and the group experienced negative consequences, the supervisor of the group, after reading over the two decisions, complimented the focal person on his/her creativity, suggested that the focal person had management potential, and questioned the management potential of the other group members (see Appendix A). For the condition in which the focal person

experienced negative consequences and the group experienced positive consequences, the supervisor complimented the group members on their creativity, suggested that they had management potential, and questioned the management potential of the focal person (see Appendix B).

These three variables--group gender, individual gender, and decision consequences--were orthogonally crossed to create eight different conditions. In order to counterbalance the effects of the arguments, there were two argument conditions. In one condition the focal person argued to promote the new supervisor from within the organization (see Appendix A), while in the other condition the focal person argued to hire from outside the organization (see Appendix B). Altogether four variables were orthogonally crossed to create a $2 \times 2 \times 2 \times 2$ factorial design.

Dependent Variables

Attributions. Subjects were asked to indicate, on seven-point Likert scales, the extent to which each of eight potential causes were the basis for the focal person's opinions (see Appendix C). Two items were distractors. Three of the remaining six items represented dispositional causes (the focal person's concern for the workers, the focal person's concern for the company, and the focal person's beliefs about the workers). The other three items represented situational causes (the focal person's potential to benefit from his/her decision, the focal person's desire to advance in the company, and the focal persons' chance for reward). The scales were reversed for three of these items and all six items were averaged to form a dispositional versus situational attribution measure. A

reliability analysis showed that this measure had a coefficient alpha of .64.

Perceptions of the Focal Person. Fifteen seven-point bipolar adjective scales originally developed by Knight and Weiss (1980) were used to measure subjects' perceptions of the focal person (See Appendix D). Knight and Weiss had subjected these items to a principal components analysis with varimax rotation. Out of 12 of the items, 3 summary variables were created on the basis of which items had the highest loadings for each component. The three summary variables created were: Honesty (positive poles of honest, sincere, trustworthy, and principled), Bias (negative poles of biased, manipulative, selfish, and opportunistic), and Independence (positive poles of independent, committed, unafraid, and consistent; Knight and Weiss, 1980). Scores on the summary variables were formed by averaging the individual items.

For the current study, Knight and Weiss' (1980) fifteen items were again subjected to a principal component analysis with varimax rotation. In this case, the loading of the items resulted in the identification of four summary variables: Trustworthiness (positive poles of sincere, likeable, trustworthy, nonmanipulative, and selfless), Objectivity (positive poles of unbiased, openminded, and intelligent), Commitment (positive poles of honest, principled, independent, committed, unafraid, and consistent), and Opportunism (negative pole of the single item nonopportunistic). Scores on the summary variables were formed by averaging individual items. The reliabilities for all of the summary variables are displayed

in Table 1. In order to facilitate comparison with Knight and Weiss' (1980) results, all seven variables were used in the statistical analyses.

Opinions. Subjects were asked to indicate which decision they would make if they were in the group. They were presented with three choices: hire from outside, promote from within, or neither (See Appendix E).

Analyses

Analyses of variance were employed to test the moderating effects of gender predicted by Hypothesis 1. Hierarchical regression analyses were employed to test the mediating effects of subjects' attributions and perceptions predicted by Hypothesis 2.

Pilot Tests

'Hire from Outside' vs 'Promote from Within.' Scenarios were developed in which the focal person argued from either side of the hiring issue. In the first condition he/she argued to hire the new supervisor from outside the organization and in the second condition he/she argued to promote from within the organization. The two conditions were created in order to avoid confounding subjects' opinions on the issue with their responses to the independent variables. Pilot testing was therefore necessary in order to ensure that the arguments employed on either side of the issue were viewed as being equally persuasive by subjects. Pilot subjects were asked to rate the strength of each argument and the scenarios were revised based on this feedback.

The measure of argument strength consisted of seven-point

Table 1

Reliability of Perceptions of the Focal Person Measures

Measures	Alpha
<hr/>	
Original Measures(Knight & Weiss, 1980)	
Honesty (honest, sincere, trustworthy, & principled)	.82
Bias (biased, manipulative, selfish, & opportunistic)	.72
Independence (independent, committed, unafraid, & consistent)	.58
New Measures	
Trust (sincere, likeable, trustworthy, nonmanipulative, & selfless)	.81
Objectivity (unbiased, openminded, and intelligent)	.71
Commitment (honest, principled, independent, committed, unafraid, & consistent)	.79
Opportunism (opportunistic)	*
<hr/>	

* The item opportunistic loaded .89 on the fourth component derived from the Principle Components Analysis.

bipolar adjective scales (1 = "Excellent," 7 = "Terrible") used in response to the requests: "Rate the strength of the argument 'Hire from outside'"; and "Rate the strength of the argument 'Promote from within.'" After a series of approximately eight pilot tests and revisions, no significant differences were found in the final test between subjects' ratings of the strength of focal person's and the group's arguments for either the condition in which the focal person argued to hire from outside the organization ($t(22) = .98, p > .10$) or the condition in which he argued to promote from within ($t(22) = .72, p > .10$).

Subjects were also asked the question, "Which side do you think presented the better argument?" A seven-point Likert scale was employed to measure responses (1 = "Hire from Outside," 4 = "Equal Arguments," 7 = "Promote from Within"). There were no significant differences between subjects' ratings of the two arguments. Table 2 contains the means and standard deviations for these variables.

Decision Consequences vs Correct/Incorrect. Additional pilot testing was necessary in order to avoid confounding the decision consequences conditions with the issue of correctness. It was necessary to test whether, when the supervisor complimented one party for creativity, subjects perceived the complimented party as necessarily having made the correct decision. Pilot subjects were presented with conditions that contained identical dialogue between the decision makers. The only aspect that varied was that in one condition the supervisor complimented the focal person and in the other condition the

Table 2
Means and Standard Deviations of Argument Strength
and Argument Preference for Each Argument Condition

Focal Person Argues 'Hire from Outside'

Position	Argument Strength*	
	M	SD
Hire from outside	2.25	1.13
Promote from within	2.25	.87
Which side presented better argument?**	3.58	1.72

Focal Person argues 'Promote from Within'

Position	Argument Strength*	
	M	SD
Hire from outside	2.50	1.08
Promote from within	2.83	1.19
Which side presented better argument?**	4.00	1.91

* Low values indicate stronger arguments

** Low values indicate preference for 'Hire from Outside'

supervisor complimented the other group members. Based on subjects' feedback, the scenarios were revised approximately eight times so that both arguments were rated as equally correct whether the proponent experienced positive or negative consequences as a result.

The scales employed to measure subjects' reactions were the same seven-point Likert scales that were employed in the previous pilot test. In the final scenario, for the condition in which the focal person argued to hire from outside, there were no significant differences in subjects' ratings of argument strength whether he/she experienced positive or negative consequences ($t(23) = .91, p > .10$). There were no significant differences between ratings of the focal person's and the group's arguments when the focal person experienced positive consequences ($t(22) = .18, p > .10$) or negative consequences ($t(22) = 1.07, p > .10$). The same results were obtained when the focal person argued to promote from inside. There were no significant differences in ratings of the focal persons's arguments when he experienced positive or negative consequences ($t(22) = .55, p > .10$). There were no significant differences between ratings of the focal person's and group's arguments whether the focal person experienced positive consequences ($t(22) = .93, n.s.$) or negative consequences ($t(22) = .92, p > .10$). Table 3 contains the means and standard deviations for these analyses.

Table 4 indicates that the second pilot test supported the validity of the first pilot test. There were still no significant differences between the mean ratings of the two

Table 3
Means and Standard Deviations of Argument Strength
for Each Argument Condition
and Each Decision Consequence Condition

Focal Person Argues 'Hire from Outside'

Consequence for Focal Person	Argument Strength*	
	Focal Person	Group
Positive	M = 2.50	2.58
	SD = 1.24	1.67
Negative	2.08	2.50
	1.00	.90

Focal Person Argues 'Promote from Within'

Consequence for Focal Person	Argument Strength*	
	Focal Person	Group
Positive	M = 2.17	2.58
	SD = .94	1.24
Negative	2.33	2.67
	.49	1.15

* Low values indicate stronger arguments

Table 4
Means and Standard Deviations of Argument Preference
for Each Argument Condition
and Each Decision Consequence Decision

Focal Person Argues 'Hire from Outside'

Consequence for Focal Person	Argument Preference*	
	M	SD
Positive	3.08	1.54
Negative	3.75	1.56

Focal Person Argues 'Promote from Within'

Consequence for Focal Person	Argument Preference*	
	M	SD
Positive	4.17	1.75
Negative	3.58	1.73

* Low values indicate preference for 'Hire from Outside'

two argument conditions when the focal person experienced positive consequences ($t(22) = 1.60, p > .10$) or negative consequences ($t(22) = .25, p > .10$). That is, subjects still perceived the two arguments as being equally persuasive.

Results

Manipulation Checks

Subjects were asked to indicate whether the focal person or the group of three had experienced positive or negative consequences (see Appendix F). As expected, the focal person was perceived as experiencing positive consequences in the positive condition, $F(1,158) = 664.98, p < .0001, \eta^2 = .81$, and experiencing negative consequences in the negative condition, $F(1,158) = 932.68, p < .0001, \eta^2 = .86$. Similarly, the group was perceived as experiencing positive consequences in their positive condition, $F(1,159) = 179.97, p < .0001, \eta^2 = .54$, and negative consequences in their negative condition, $F(1,159) = 772.91, p < .0001, \eta^2 = .83$. Table 5 contains the means and standard deviations for these analyses.

Pilot testing had been conducted in order to operationalize the concept of decision consequences as distinct from correct/incorrect (see Appendix F). In order to check this manipulation, subjects were asked to indicate whether they viewed the focal person and the group as being correct or incorrect. The correctness responses were correlated with the decision consequences condition to which the subjects were exposed for both the focal person ($r = .23, p < .01$) and the group ($r = .32, p < .001$). In order to investigate the

Table 5
Means and Standard Deviations
of Perceived Benefiting, Suffering, Correctness
for Decision Consequence Conditions

	Consequence for Focal Person	
	Positive	Negative
Did Individual Benefit?*	M = 1.93 SD = .27	1.02 .16
Did Individual Suffer?*	1.01 .11	1.93 .25
Was Individual Correct?*	1.80 .40	1.59 .49
Was Individual Incorrect?*	1.20 .40	1.41 .50
Did Group Benefit?*	1.04 .19	1.95 .22
Did Group Suffer?*	1.74 .44	1.03 .15
Was Group Correct?*	1.30 .46	1.63 .49
Was Group Incorrect?*	1.70 .46	1.38 .49

* High values indicate response was "Yes"

mediating effects that subjects' perceptions of the correctness had between the decision consequences and their opinions on the issue, a new variable was formed. Four questions were asked concerning the correctness of the decisions of the parties involved (Was the individual correct? Was the individual incorrect? Was the group correct? Was the group incorrect?). The scales for two of these questions were reversed and the responses were averaged to form a measure of the perceived correctness of opinions. A reliability analysis of the new correct/incorrect measure resulted in a coefficient alpha of .88. The relationship between the new measure and the decision consequences manipulation was found to be significant ($r = .23, p < .01$). When either the focal person or the group experienced positive consequences, subjects rated their argument as being correct and when they experienced negative consequences, subjects rated their argument as being incorrect. This finding had significant implications for the study, which will be discussed below.

Attributions

Analyses of variance did not reveal a relationship between any of the independent variables and attributions made for the communicators' opinions. Thus, many of the predictions were not supported.

Hypothesis 1 stated that individual and group gender would act as moderators of the relationship between the decision consequences and observers' perceptions and attributions. More specifically, for the case where a male focal person disagreed with male group members and experienced positive consequences it

was predicted that he would be viewed as having unstable, external motivations. However, when a male disagreed with female group members, it was predicted that the man would be viewed as having stable, internal motivations whether he experienced positive or negative consequences as a result of his opinion. Conversely, when a woman disagreed with male group members, it was predicted that she would be viewed as having unstable, external motivations whether she experienced positive or negative consequences. These predictions were based on the premise that males would be viewed as acting within their traditional sex-role while females would be viewed as acting outside of their traditional sex-role. The evidence for these effects would be demonstrated by a three-way interaction between focal person gender, group gender, and decision consequences. After disagreeing with either men or women, the opinion of a female was expected to be attributed to external motivations when she experienced positive consequences and to internal motivations when she experienced negative consequences. However, these results were not found with either a two-way interaction between focal person gender and decision consequences or a three-way interaction between all three independent variables. The interaction of focal person gender, group gender, and decision consequences was not significant, $F(1,159) = .00, p > .10$. Table 6 contains the means and standard deviations for the analysis.

Perceptions of the Focal Person

The attribution measure (high scores = internal attributions) was positively correlated with the original

Table 6
Means and Standard Deviations of Decision Consequences X
Group Gender X Focal Person Gender Interaction
Dependent Measure: Attribution*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.55 SD = .92	2.63 .97
Female	3.00 1.01	2.72 1.11

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.67 SD = .97	2.72 1.11
Female	2.77 2.54	2.54 .89

* Low values indicate dispositional attributions,
high values indicate situational attributions

(Knight & Weiss, 1980) measures of Honesty ($r = .44$, $p < .001$), Bias ($r = .47$, $p < .001$), and Independence ($r = .34$, $p < .001$), and also with the current perception measures of Trustworthiness ($r = .45$, $p < .001$), Objectivity ($r = .34$, $p < .001$), Commitment ($r = .40$, $p < .001$), and Opportunism ($r = .23$, $p < .001$). This indicates that when actors' opinions were attributed to internal motives, they were also perceived as more honest, independent, trustworthy, objective, committed, and less biased and less opportunistic by the subjects. When their opinions were attributed to external motives, they were perceived less favorably by observers. The correlational relationships, however, demonstrate no cause and effect. These findings were as expected, and have been demonstrated in previous research.

Hypothesis 1 stated that individual and group gender would act as moderators for the relationship between the decision consequences and observers' perceptions. As in the case of attributions, these effects would be demonstrated by a three way interaction between the three independent variables: focal person gender, group gender, and the decision consequences manipulation. Since observers' attributions were not significantly affected by the manipulations, however, one might not expect perceptions of the focal person to be affected either. For six of the seven perception variables, this was the case; there were no significant three-way interactions when these variables were employed as dependent measures. The means and standard deviations for these analyses are presented in Tables 7 through 12. There was a significant three-way

Table 7
Means and Standard Deviations of Decision Consequences X
Group Gender X Focal Person Gender Interaction
Dependent Measure: Honesty*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 1.94 SD = 1.87	1.94 .87
Female	2.31 .95	2.29 .87

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.01 SD = .72	2.26 1.26
Female	2.00 1.89	2.60 1.09

* Low values indicate perceptions of honesty

Table 8

Means and Standard Deviations of Decision Consequences X

Group Gender X Focal Person Gender Interaction

Dependent Measure: Bias*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 3.35 SD = 1.20	3.55 1.09
Female	3.36 1.16	3.74 .70

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 3.15 SD = .89	3.59 1.24
Female	3.65 1.02	3.45 1.27

* High values indicate perceptions of bias

Table 9

Means and Standard Deviations of Decision Consequences X

Group Gender X Focal Person Gender Interaction

Dependent Measure: Independence*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 1.80$ $SD = .87$	1.69 .62
Female	1.90 .86	2.03 1.07

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 1.79$ $SD = .58$	1.80 .64
Female	1.74 .90	2.04 1.06

* Low values indicate perceptions of independence

Table 10

Means and Standard Deviations of Decision Consequences X

Group Gender X Focal Person Gender Interaction

Dependent Measure: Trust*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 2.53$ $SD = 1.04$	2.51 .90
Female	2.71 1.07	3.00 1.05

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 2.47$ $SD = 1.04$	2.60 .90
Female	2.57 1.15	3.11 1.32

* Low values indicate perceptions of trust

Table 11
Means and Standard Deviations of Decision Consequences X
Group Gender X Focal Person Gender Interaction
Dependent Measure: Objectivity*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.53 SD = 1.05	2.85 .88
Female	3.16 1.22	2.77 1.20

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 3.03 SD = 1.05	3.05 1.26
Female	3.53 1.38	3.38 1.43

* Low values indicate perceptions of objectivity

Table 12

Means and Standard Deviations of Decision Consequences X

Group Gender X Focal Person Gender Interaction

Dependent Measure: Commitment*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 1.86$ $SD = .85$	1.77 .65
Female	2.01 .82	2.08 .89

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	$M = 1.87$ $SD = .85$	1.97 .67
Female	1.83 .80	2.20 .97

* Low values indicate perceptions of commitment

interaction for the single item Opportunism, $F(1,159) = 6.86$, $p < .01$, $\eta^2 = .35$. The means and standard deviations for this analysis are presented in Table 13. The individual rated the least opportunistic, ($M = 3.20$) was a male disagreeing with men and suffering. The individual rated the most opportunistic ($M = 4.60$), was a female disagreeing with women and benefiting. These results are consistent with the benefit/suffer theory in general, but do not support the specific hypothesis. There is the possibility that this finding is due to alpha error, especially since the Opportunism variable consists of only one item and is probably quite unreliable.

There were two significant main effects on the perceived objectivity measure. Those who experienced positive consequences were rated as more objective than those who experienced negative consequences, $F(1,159) = 5.83$, $p < .01$, $\eta^2 = .46$, and focal persons in the male groups were perceived as more objective than those in the female groups, $F(1,159) = 4.06$, $p < .05$, $\eta^2 = .32$. Table 14 contains the means and standard deviations for these analyses.

Observers' Opinions

Consequences of the decision had significant main effects on observers' opinions, $F(1,159) = 24.56$, $p < .001$, $\eta^2 = .78$. Table 15 contains the means and standard deviations for this analysis. The observers agreed with the party who enjoyed the positive consequences and stated the opposite opinion of the party who experienced the negative consequences. This indicates that, in this context, observers were affected by the consequences of the decision on the decision-makers but the

Table 13
Means and Standard Deviations of Decision Consequences X
Group Gender X Focal Person Gender Interaction
Dependent Measure: Opportunism*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 3.75 SD = 1.59	4.55 2.14
Female	3.35 1.31	4.60 1.39

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 3.20 SD = 1.28	4.45 1.76
Female	4.20 1.70	3.25 1.44

* High values indicate perceptions of opportunity

Table 14
Means and Standard Deviations of
Decision Consequences and Group Gender Main Effects
Dependent Measure: Objectivity

Decision Consequences for Focal Person	Objectivity*	
	M	SD
Positive	2.83	1.10
Negative	3.28	1.28

Group Gender	Objectivity*	
	M	SD
Male	2.87	1.05
Female	3.25	1.19

* Low values indicate perceptions of objectivity

Table 15
Main Effects of Decision Consequences
on Subjects' Opinions*

Decision Consequences for Focal Person	Subjects' Opinions	
	M	SD
Positive	2.44	.78
Negative	1.77	.91

* High values indicate agreement with focal person

influence was in the direction opposite to that found by earlier research.

Subjects' opinions on the issue were significantly correlated with their attributions for the focal person's opinion ($r = .27, p < .01$). When subjects made internal attributions for the focal person's opinion, they tended to agree with the focal person's opinion, but when subjects made external attributions for the focal person's opinion, they tended to disagree with the focal person. Table 16 contains the correlations between subjects' opinions on the issue and the perception variables. As with attributions, all of the correlations were significant in the predicted direction.

As discussed above, the effects would demonstrated by a three-way interaction between focal person gender, group gender, and opinion consequences. The effect was not found with the previous measures, nor was it found with the measure of observers' opinions. The three-way interaction term was not significant, $F(1,155) = 1.48, p > .10$, failing to support the hypothesis. Table 17 contains the means and standard deviations for these hypotheses.

A significant two-way interaction was found between focal person gender and group gender, $F(1,155) = 4.63, p < .05, \eta^2 = .15$. When focal persons differed with members of their own gender, subjects were more likely to agree with their position. When they differed with members of the opposite gender, observers tended to disagree with them. Table 18 contains the means and standard deviations for these conditions. There appears to be a contrast effect between focal person and

Table 16
Correlations between
Subjects' Opinions¹ and Perception Measures

Measures	r
Honesty	.25***
Bias	.30***
Independence	.12*
Trust	.28***
Objectivity	.39***
Commitment	.17**
Opportunism	.20**

¹ High = 'Hire from Outside', Low = 'Promote from Within'

* $p < .05$

** $p < .01$

*** $p < .001$

Table 17

Means and Standard Deviations of Decision Consequences X
 Group Gender X Focal Person Gender Interaction
 Dependent Measure: Subjects' Opinions*

Positive Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.45 SD = .76	2.35 .88
Female	2.40 .82	2.55 .69

Negative Consequences for Focal Person

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 1.95 SD = 1.00	1.65 .88
Female	1.45 .69	2.05 1.00

* High values indicate agreement with focal person

Table 18
Means and Standard Deviations of
Focal Person Gender X Group Gender Interaction
Dependent Measure: Subjects' Opinions*

Group Gender	Focal Person Gender	
	Male	Female
Male	M = 2.20 SD = 1.45	2.00 1.94
Female	1.92 1.55	2.30 1.16

* High ratings indicate agreement with focal person

group gender that leads observers to disagree with the focal person when he/she is the sole representative of his/her gender. This was predicted only for the condition in which a woman disagrees with men.

Regression Analysis

The second Hypothesis predicted that, due to the gender of the actors and subjects' reactions to the decision consequences, observers' attributions and perceptions would have a mediating influence on subjects' opinions on the issue discussed by the decision-makers. The probable existence of the proposed causal chain can be assessed by a multiple hierarchical regression analysis. If attributions and perceptions do indeed mediate the relationship between decision consequences and observers' opinions, then entering them into a regression equation predicting opinions from decision consequences alone would result in a significant increase in R^2 . This would indicate that the predicted mediator shares variance with observers' opinions. However, it does not necessarily follow that the predicted mediator shares the same variance as decision consequences, which must be the case in order to find support for a mediating effect. In order to test whether the two predictors share the same variance with the criterion variable, the attribution or perception variables are entered on the first step of the regression and the decision consequences variable is entered on the second step. If there is no significant increase in R^2 after decision consequences is added, this indicates that it is not accounting for any additional variance of subjects' opinions. The variance of decision consequences is

completely shared with the variance of the proposed mediating variable. This can be interpreted as support for an influence of attributions or perceptions on the relationship between decision consequences and subjects' opinions.

If the mediating effect of attributions and perceptions is not present, the pattern of results described above should not occur. That is, attributions and perceptions may not improve prediction of subjects' opinions over that of decision consequences alone. This would indicate that they are not accounting for any additional variance of subjects' opinions. Even if they do improve the prediction of subjects' opinions, decision consequences should not improve the ability of attributions or perceptions in predicting opinions. This would indicate that the variables are accounting for unique variance and the mediating effect would not be present.

The results of these regression analyses did not support the existence of the proposed causal chain. As shown in Table 19, in almost all cases, adding the proposed mediating attribution and perception variables to the equation predicting subjects' opinions from the decision consequences (benefit/suffer) resulted in a significant increase in R^2 . However when the order was reversed, the addition of decision consequences to the equations between these variables and subjects' opinions consistently led to a larger increase in R^2 , indicating that correctness accounted for more unique variance than the perception variables. These results are contained in Table 20. Observers who had positive perceptions of the communicator tended to agree with his/her opinion but

Table 19

Increase in R^2 When Each Attribution and
 Perception Variable Was Added to
 Decision Consequences--Subjects' Opinions Equation

Measures	Original R^2	New R^2	df	F
Attribution	.13	.22	1,157	16.53***
Honesty	.13	.19	1,157	10.12**
Bias	.13	.22	1,157	16.88***
Independence	.13	.15	1,157	2.93
Trust	.13	.22	1,157	16.16***
Objectivity	.13	.24	1,157	22.21***
Commitment	.13	.16	1,157	5.01*
Opportunism	.13	.19	1,157	28.67***

* $p < .01$

** $p < .001$

*** $p < .0001$

Table 20
 Increase in R^2 When Decision Consequences
 Was Added to Each
 Attribution or Perception--Subjects' Opinions Equation

Measures	Original R^2	New R^2	df	F
Attribution	.07	.22	1,157	28.49*
Honesty	.06	.19	1,157	24.05*
Bias	.09	.22	1,157	25.91*
Independence	.02	.15	1,157	28.84*
Trust	.08	.22	1,157	26.75*
Objectivity	.15	.24	1,157	18.33*
Commitment	.03	.16	1,157	24.54*
Opportunism	.04	.19	1,157	28.67*

* $p < .0001$

these perceptions did not mediate the relationship between decision consequences and opinions.

The Influence of Perceived Correctness

It is evident from the correlational data that the only concrete effects of the decision consequences was on their perceptions of the correctness and incorrectness of the decision reached by the group and the focal person. That is, the relationship between decision consequences and the dependent variables was largely determined by observers' perceptions of correctness/incorrectness. When the focal person (or the group) outlined a decision and the supervisor complimented its creativity (benefited), subjects apparently interpreted the compliment as evidence that the decision was correct. Conversely, when the abilities of the focal person (or the group) were questioned by their manager, subjects interpreted this as evidence that the decision was incorrect.

In order to further investigate the influence of the perceived correctness of the arguments, multiple hierarchical regression analyses were conducted. Employing the attribution and perception variables as dependent measures, the decision consequences variable was entered into regression equations on the first step and the correctness measure was entered on the second step. The results were analyzed following the same logic as the previous analyses. If perceptions of correctness do mediate the relationship between decision consequences and subjects' attributions and perceptions, entering the correctness measure on the second step would result in a significant increase in R^2 . Conversely, there should not be a

significant increase if the variables are entered in the reverse order.

Attribution. A significant mediating relationship was found between observers' perceptions of correctness and observers' attributions. When the correct/incorrect measure was added to the equation predicting attributions from the decision consequences manipulation, the increase in R^2 from .00 to .09 was significant, $F(1,155) = 15.64$, $p < .0001$. When these variables were entered in the opposite order however, the change in R^2 (from .07 to .09) was not significant. These results are consistent with the interpretation that the effects of the decision consequences manipulations are operating on attributions through their effects on correctness perceptions.

Since significant effects were found, it was necessary to cross-validate the measure. Multiple regression procedures take advantage of chance error of measurement for any given sample, which results in an R^2 that is valid for that sample but is misleading when the predictors are applied to a new sample. The result is that when the beta weights that were derived from the first sample are applied to a second sample, they will have lower predictive power, resulting in shrinkage of R^2 . Cross-validation procedures can test for this effect by applying the beta weights from one half the sample to predict the responses for the other half of the sample. These predicted responses are then correlated with their actual responses and the resulting r is squared. This new R^2 should be lower than the original R^2 but a substantial reduction indicates that shrinkage has taken place.

Attempts to cross-validate the attribution measure were not successful. The R^2 computed from the data of one half of the sample was reduced from .23 to .03 when the beta weights were used to predict responses for the second half. Thus, the evidence in support of the notion that subjects' perceptions of correctness mediated the relationship between decision consequences and their attributions was not validated.

Perceptions of the Focal Person. Table 21 contains the results of adding the correctness measure to the regression equation between the decision consequences variable and each of the perception variables. All of the increases in R^2 were significant (p 's < .0001) while, as shown in Table 22, R^2 was significantly increased for only two of the variables by adding decision consequences to the equation predicting the perception variables from the correctness measure, (Trust and Opportunism, p 's < .05). Typically, adding correctness to the equation increased the amount of variance accounted for from 0% to 7-17%. As shown in Table 23, however, attempts to cross-validate the results were mixed. The initial R^2 computed from the data of one half the sample increased for some of the variables and decreased for others when their beta weights were applied to the second half. Except for the original Knight and Weiss (1980) measure of Honesty and the Trust measure developed in the current study, little or no evidence was found from which to conclude that subjects' perceptions of correctness influenced their perceptions of the actors. Even for Honesty and Trust, R^2 shrank dramatically.

Table 21
Increase in R^2 When Correctness Measure
Was Added to Each
Decision Consequences--Attribution or Perception Equation

Measures	Original R^2	New R^2	df	F
Attribution	.00	.09	1,157	15.64***
Honesty	.00	.16	1,157	29.30***
Bias	.00	.17	1,157	31.71***
Independence	.00	.05	1,157	8.94*
Trust	.00	.20	1,157	39.43***
Objectivity	.04	.20	1,157	32.35***
Commitment	.00	.09	1,157	15.96***
Opportunism	.01	.07	1,157	9.93**

* $p < .01$

** $p < .001$

*** $p < .0001$

Table 22
 Increase in R^2 When Decision Consequences
 Was Added to Each
 Correctness--Attribution or Perception Equation

Measures	Original R^2	New R^2	df	F
Attribution	.07	.09	1,157	3.21
Honesty	.15	.16	1,157	1.16
Bias	.16	.17	1,157	2.40
Independence	.05	.05	1,157	1.14
Trust	.17	.20	1,157	4.20*
Objectivity	.19	.20	1,157	.40
Commitment	.08	.09	1,157	1.08
Opportunism	.04	.07	1,157	4.37*

* $p < .05$

Table 23
Change in R^2 When Each
Correctness Regression Cross-Validated

Measures	Original R^2	New R^2	df
Attribution	.23	.03	1,77
Honesty	.30	.10	1,77
Bias	.34	.05	1,77
Independence	.17	.01	1,77
Trust	.29	.10	1,77
Objectivity	.06	.34	1,77
Commitment	.27	.03	1,77
Opportunism	.04	.05	1,77

Opinions. As with the previous variables, the addition of the correct/incorrect measure to the equation predicting subjects' opinions from the consequences of the decision resulted in a significant increase in R^2 from .13 to .70, $F(1,155) = 296.13$, $p < .00001$. When the variables were entered in the opposite order, there was a significant increase in R^2 , $F(1,155) = 5.25$, $p < .05$, but the change in R^2 (from .69 to .70) was not nearly as great. Thus, the results are consistent with the notion that subjects' perceptions of the correctness of the arguments played a strong mediating role between the decision consequences and their opinions on the issue. This effect was demonstrated to remain strong after cross-validation. The R^2 computed from the data for one half of the sample shrank only slightly (from .67 to .63) when their beta weights were applied to the other half of the sample.

Discussion

Previous research has shown that when an individual suffered as a result of stating an opinion, he was admired by observers. The observers made internal attributions for his opinions and they perceived him as being more honest, independent, and unbiased. When the actor benefited as the result of stating an opinion, observers made external attributions and perceived him as being less honest and independent, and more biased (Knight & Weiss, 1980). The same results were expected in this study, but due apparently to the influence of correctness perceptions, this was not found. The expected mediating effects of subjects' attributions and

perceptions on the relationship between decision consequences and subjects' opinions were not found, either. Instead, a strong mediating effect for the correctness of the decision on the relationship between the decision consequences and subjects' opinions was found. Correctness did not appear to mediate the relationship between decision consequences and subjects' attributions and perceptions.

Extensive pilot testing had been performed in an attempt to remove the confounding effects of correctness perceptions. While pilot subjects had perceived the correctness of the decision to be independent of the consequences of the decision manipulation, this was not found in the current study. Instead, decision consequences and perceptions of correctness were highly correlated. When the decision-makers experienced positive consequences, subjects viewed this as evidence that they had made the correct decision. When the decision-makers experienced negative consequences, subjects viewed this as evidence that they had made the incorrect decision. Thus, manipulating the decision consequences conditions served to manipulate subjects' perceptions of the correctness of the decision. Regression analyses revealed that observers' perceptions of correctness outweighed the influence of group gender or dissenter gender when subjects formed their own opinions concerning the correct solution.

The predicted effects of the gender of the actors and the sex-role of the situation did not materialize. Neither of these variables appeared to have had a significant effect on any of the perceptions or attributions made by observers.

Optimistically, one could conclude that the sex-role of the situation and the gender of those involved were not issues on which subjects chose to base their opinion; the actual quality of the decision was of more importance. These would certainly be welcome findings, and somewhat different from those found in the past.

One reason for the failure to support the hypotheses may have been the overall social context in which the people described in the study interacted. In the Knight and Weiss (1980) study, the individual who experienced positive or negative consequences was a member of the government of a newly-emerging African nation. His opinion was one of support for his new government. In the negative consequence condition, he experienced the breakdown of friendships, verbal threats against his family, demonstrators throwing rocks through his windows, and a son who was permanently disabled by demonstrators. In the positive consequence condition he received a desirable government appointment, new business opportunities, an improved standard of living, and a new home. In contrast, the positive consequence condition for the current study consisted of the dissenter's boss reading over the decision, complimenting the dissenter on his/her creativity, suggesting that he/she is a good candidate for management training, and questioning whether the other group members have the same skills. In the negative consequence condition, the reverse took place. The boss complimented the group on their creativity, suggested that they may be ready for management training, and questioned whether the dissenter was ready. Thus,

the decision consequences manipulations in the two studies were very different.

In the Knight and Weiss (1980) study the position the individual took was on a large moral and ethical scale affecting every aspect of his life, as well as the lives of his family members. In the current study the issue is relatively narrowly defined. It is simply a matter of developing a policy about how to replace a person on the job. Therefore it can be argued that the moral or ethical issue of suffering (or benefiting) for sticking to one's opinion becomes less important. Whereas the individual in the first study (Knight & Weiss, 1980) might even be viewed as a martyr when considering the pain and suffering he and his family experienced, it is more difficult to argue that someone is a martyr because they may not receive management training.

The fact that the current study described a business setting may shed further light on the issue of observers viewing positive decision consequences as evidence of "correctness." Businesses must make a profit if they are to continue to exist. It is therefore important for everyone who works for a business, especially those holding management positions, to maximize the probability that the company will make a profit. Given that this was the social environment in which the people in the scenario were operating, it may therefore be that making the correct decision became the overriding concern. The only external evidence that observers had concerning the correctness of the decision was that the boss, the authority figure, liked it. Since making the correct decision may be an important

concern in a business situation, the issue of whether the dissenter experienced positive or negative consequences as a result of taking a stand lost salience and observers attended to the clues that indicated correctness.

In fact, the scenarios were written in such a manner as to increase the salience of the importance of making the correct and most profitable decision. As they began the meeting, one of the participants stated, "It's complicated by the fact that we're in a tight financial situation at the moment. Bob has already emphasized the fact that making the wrong decision could cost us more money than we can afford to lose." This statement was originally included in the scenario to help balance subjects' reactions to the two policy positions. Pilot subjects had a tendency to favor the argument to "promote from within" out of an expressed feeling of loyalty to the company's workers. The statement about tight finances added weight to the argument of hiring "an experienced supervisor" from outside the organization and thus helped in balancing subjects' opinions about the two arguments. Unfortunately, the issue of fairness may have been replaced by the issue of correctness. Subjects may have felt there was a need to identify the correct solution to the problem in order to insure the viability of the company. Thus, the salience of the experimental manipulations would have been significantly diminished except as evidence to help identify the correct decision.

Study II

Based on the line of thought outlined above, a second study was conducted. All of the stimulus materials were identical to those in Study I except in one respect: The organization that employed the group members was changed from a for-profit enterprise to a non-profit enterprise. Applied Technologies became Food for the Children, and the decision-makers discussed whether they should promote one of their local volunteers to a paid position as a regional director or hire an experienced director from outside the organization (see Appendix G). It was hypothesized that, given a non-profit organizational setting, observers would not feel that making the most profitable decision was as important as in Study I. Therefore the moral issues of sticking to ones decision against all odds or making a decision "because that's what the boss wants to hear" would increase in salience. Subjects would therefore attend to positive and negative consequences of the decision as previously hypothesized.

Method

Subjects

Subjects were 33 undergraduate students enrolled at Kansas State University; 17 (52%) were female and 16 (48%) were male. They received credit toward fulfilling general psychology requirements for their participation.

Task

Subjects read a transcript of a small group in a non-profit organization engaged in a decision-making task followed by a short description of the consequences of their decision (see Appendix G). The issue in question was whether to replace a retiring paid director by hiring a person from outside the organization or by promoting a volunteer from within the organization. As in Study I, the decision-making group consisted of four persons. When they reached a final decision, three of the group were in agreement and one individual arrived at a decision different from the rest of the group. When the final decision was presented to their supervisor, the focal person's opinion was printed with the group's decision as a minority position.

Manipulations

Decision Consequences. The consequences of the decisions were manipulated for both the individual who reached an independent decision and for the group members who were in agreement. In the positive consequence (benefit) condition for the focal person, the supervisor read the two decisions, complimented the focal person on his/her creativity, suggested that the focal person had management potential, and questioned whether the other group members had management potential. In the negative consequence (suffer) condition for the focal person, the supervisor complimented the group members on their creativity, suggested that they had management potential, and questioned whether the focal person had management potential.

There was no manipulation of argument condition in Study

II, since there were no significant differences between the two conditions in Study I. The focal person argued that the organization should promote one of their volunteers. There were no manipulations of focal person or group gender since the hypothesis was not directly concerned with these variables. All decision-makers in the scenario were male.

Dependent Variables

Attributions. As in Study I, subjects indicated on seven-point Likert scales the extent to which they attributed the focal person's opinion to dispositional causes (the focal person's concern for the volunteers and the organization) or to situational causes (the potential to benefit personally by making the "right" decision). After removing two distractor items, the scales to three of the remaining items were reversed and the six items were averaged to form the dispositional vs. situational index of attribution. A reliability analysis of this measure resulted in a coefficient alpha of .86.

Perceptions of the Focal Person. The three perception scales (Honesty, Independence, and Bias) identified by Knight and Weiss (1980) and the four scales identified in Study I (Nonopportunistic, Trustworthy, Objective, and Independent) were again used for Study II. The reliability coefficients for these measures are presented in Table 24.

Opinions. The same opinion measure used in Study I was again used in Study II.

Correct/Incorrect. The scales for two of the responses to the questions "Was the individual/group correct?" and "Was the individual/group incorrect" were reversed, and the four items

Table 24

Study II

Reliability of Perceptions of the Focal Person Measures

Measures	Alpha
<hr/>	
Original Measures(Knight & Weiss, 1980)	
Honesty (honest, sincere, trustworthy, & principled)	.81
Bias (biased, manipulative, selfish, & opportunistic)	.84
Independence (independent, committed, unafraid, & consistent)	.65
New Measures	
Trust (sincere, likeable, trustworthy, nonmanipulative, & selfless)	.82
Objectivity (unbiased, openminded, and intelligent)	.62
Commitment (honest, principled, independent, committed, unafraid, & consistent)	.74
Opportunism (opportunistic)	*
<hr/>	

* The measure Opportunism consisted of only one item

were averaged to form a measure of perceived correctness/incorrectness of the decision. A reliability analysis of this measure resulted in a coefficient alpha of .74.

Analyses

Student's t tests were employed in order to investigate the effects of decision consequences on subjects' attributions, perceptions, opinions, and perceptions of correctness. The decision consequences manipulation served as the single independent variable. In order to investigate the possible mediating effects of subjects' attributions and perceptions, hierarchical regression analyses were employed. Each of these measures was added separately to the regression equation predicting subjects' opinions from the decision consequences manipulation. Hierarchical regression analyses were also employed in order to investigate the possible mediating effects of subjects' perceptions of the correctness of the decisions. For each of the dependent measures, the correct/incorrect measure was added to the regression equation containing the decision consequences manipulation.

Results

Manipulation Checks

In order to investigate whether observers' perceptions of correctness were still affected by the decision consequences manipulations in Study II, a t test was performed between the positive and negative consequences groups using perceptions of correctness as the dependent measure. The difference between the two groups was significant ($t(31) = 3.44, p < .01$). However, in this study, the relationship was in the opposite

direction to that in Study I. Actors who were perceived as experiencing positive consequences were rated as having made the incorrect decision ($M = 1.34$, $SD = .40$), while actors who were perceived as experiencing negative consequences were rated as having made the correct decision ($M = 1.79$, $SD = .33$). The correlation between decision consequences and perceived correctness in Study I was $r = -.23$, $p < .01$, whereas the correlation between the same variables in Study II was $r = .70$, $p < .001$. The implications of this reversal in subjects' perceptions will be discussed below.

Attributions

It was predicted that subjects would attribute to internal causes the opinions of a focal person who experienced negative consequences, and to external causes the opinions of a focal person who experienced positive consequences. A t test indicated that there was no significant difference between the positive ($M = 2.74$, $SD = 1.48$) and the negative ($M = 2.78$, $SD = .61$) conditions.

Regression analysis did not reveal effects of perceptions of correctness on attributions. The change in R^2 when correct/incorrect was added to the decision consequences--attribution equation was nonsignificant, $F(1,31) = .27$, $p > .10$. Thus, neither decision consequences nor correctness were major influences on subjects' attributions for the actors' opinions.

Perceptions of the Focal Person

It was predicted that actors who experienced negative consequences would be perceived more positively than actors who

experienced positive consequences. No support was found for this prediction, however. *T* tests revealed no significant differences in perceptions between the two conditions for any of the perception variables. Table 25 contains the means and standard deviations for these analyses.

Adding the correctness measure to each decision consequence--perception regression equation revealed very weak mediating influence similar to that found in Study I but in the opposite direction. Table 26 contains the results of the forced hierarchical regressions. For the three items Honesty, Bias, and Trust, the change in R^2 with the addition of the correctness measure was significant (p 's < .05). As shown in Table 27, when correct/incorrect was entered into the regression on the first step, the addition of the decision consequences variable on the second step did not significantly increase R^2 for any of the perception variables (p 's > .10). However, as shown in Table 28, an attempt to cross-validate the results was not successful. The R^2 of approximately .30 calculated from the data of one half of the sample dropped to approximately .04 when their beta weights were applied to the other half of the sample.

The changes for the other items were of comparable magnitude to those in the Study I, but the smaller sample lowered the power for testing the effects, resulting in the marginally significant results. Correctness may have served as a weak mediating variable for some perceptions, but in this case decision-makers suffering negative consequences as a result of their decision were viewed more positively, while those

Table 25
Study II
Means and Standard Deviations of T tests
Between Decision Consequences Conditions
Dependent Variables: Attribution
and Perception Measures*

Measures	Decision Consequences for Focal Person	
	Positive	Negative
Attribution**	M = 2.74 SD = 1.48	2.77 .61
Honesty	2.34 1.19	2.18 1.10
Bias	2.73 1.07	2.52 1.05
Independence	1.72 .72	1.74 .80
Trust	3.04 1.14	2.69 1.22
Objectivity	3.21 1.33	2.47 1.17
Commitment	1.86 .75	1.86 .85
Opportunism	3.25 1.95	4.41 2.18

* Low values indicate positive perceptions, high values indicate negative perceptions

** Low values indicate dispositional attributions, high values indicate situational attributions

Table 26

Study II

Increase in R^2 When Correctness Measure

Was Added to Each

Decision Consequences--Attribution or Perception Equation

Measures	Original R^2	New R^2	df	F
Attribution	.00	.01	1,28	.27
Honesty	.01	.13	1,28	4.23*
Bias	.01	.14	1,28	4.62*
Independence	.00	.01	1,28	.32
Objectivity	.08	.18	1,28	3.35
Trust	.02	.19	1,28	6.06**
Commitment	.00	.07	1,28	2.26
Opportunism	.07	.10	1,28	.83

* $p < .05$ ** $p < .01$

Table 27

Study II

Increase in R^2 When Decision Consequences

Was Added to Each

Correctness--Attribution or Perception Equation

Measures	Original R^2	New R^2	df	F
Attribution	.00	.01	1,28	.12
Honesty	.11	.13	1,28	.50
Bias	.13	.14	1,28	.38
Independence	.01	.01	1,28	.12
Objectivity	.17	.18	1,28	.28
Trust	.18	.19	1,28	.28
Commitment	.05	.07	1,28	.62
Opportunism	.00	.10	1,28	3.40

Table 28
Study II
Change in R^2 When Each
Correctness Regression Cross-Validated

Measures	Original R^2	New R^2	df
Honesty	.34	.00	1,77
Bias	.61	.02	1,77
Independence	.27	.07	1,77
Trust	.36	.08	1,77
Objectivity	.65	.04	1,77
Commitment	.41	.04	1,77
Opportunism	.12	.13	1,77

experiencing positive consequences were viewed more negatively.

Opinions

It was predicted that observers would be most influenced by the focal person who experienced negative consequences as a result of maintaining his opinion. Consequences of the decision did have a marginal effect on the subjects' opinions ($t(31) = 1.79, p < .10$). Subjects tended to agree with actors who experienced negative consequences ($M = 1.82, SD = .88$) and disagree with actors who experienced positive consequences ($M = 2.38, SD = .89$). Subjects' perceptions of the correctness of the decision had a much larger effect, however. The increase in R^2 (from .09 to .75) when correct/incorrect was added to the decision consequences--subjects' opinions equation was significant, $F(1,29) = 80.76, p < .0001$, while entering the variables in the reverse order did not lead to a significant change, $F(1,29) = 3.28, p < .10$. These effects were successfully cross-validated. The R^2 of .81 calculated from the data of one half of the subjects only dropped to .71 when applied to the other half. Those who rated the focal person as having been correct said they would have made the same decision (hire from outside), and those who rated him as incorrect said they would have made the opposite decision (promote from within). Since decision consequences and correct/incorrect were highly correlated ($r = .72$) it can be argued that actors who experienced negative consequences were generally viewed as being correct and that subjects tended to agree with them. Conversely, actors who experienced positive consequences were viewed as incorrect and subjects tended to

disagree with them.

Discussion--Study II

Study II was conducted in an attempt to free the decision consequences manipulation from the confounding effects of observers' perceptions of the correctness or incorrectness of the actors' decisions. This was done by changing the social setting of the decision-making situation from that of a for-profit business to a non-profit volunteer organization. The effects of this change on subjects' perceptions were dramatic. There was a complete reversal in subjects' reactions to the consequences of the decision. In Study I (a business meeting), when the target person stuck to his/her opinion and was questioned by the boss as a result, subjects viewed this as evidence that the individual had made the incorrect decision. In Study II (a non-profit organization meeting), when the target person stuck to his opinion and was questioned by the boss as a result, subjects viewed this as evidence that the individual had made the correct decision. The only aspect that differed between the two studies was the type of organization in which the actors were interacting. In the case where maintaining an opinion and experiencing positive consequences was perceived as evidence of a correct decision, the organization was a private company which, one could argue, is primarily concerned with making a profit. In the case where maintaining an opinion and experiencing positive consequences was perceived as evidence of an incorrect decision, the organization was a volunteer organization primarily concerned with altruistic and charitable activities.

General Discussion

Previous research findings (Knight & Weiss, 1980) demonstrated that when a person suffered as a result of maintaining an opinion in spite of adverse reactions, he was positively perceived by observers and they were influenced by his opinions on the issue. When he benefited he was negatively perceived by observers and he had less influence on their opinions. The results of Study II parallel these findings but the results of Study I are quite different. In the Knight and Weiss (1980) study, the person held a governmental position in an emerging African nation and his opinion was one of support for the new government. In Study II the person was a member of a non-profit organization and his opinion concerned the best method of replacing a local director. Study I revolved around a business manager whose decision concerned the best method of replacing a first line supervisor. The most salient difference between the first two situations and the latter situation would appear to be one of profit. It can be argued that the independent individual was admired and respected for his opinion and his experiencing negative consequences as long as the situation concerned the primarily moral and ethical considerations of independent self-government or the feeding of starving children.

When the profit motive was introduced to the scenario, the emphasis shifted entirely. Observers were no longer concerned with the higher moral considerations of maintaining one's opinion in the face of adversity. Instead, their focus shifted to effectiveness. What decision will be most economically

beneficial for the company? What decision is the correct decision? The only evidence of correctness available to subjects (other than their own biases) was the boss's approval of the "creativity" of one decision and his subsequent suggestion that the author(s) would make "(a) good candidate(s) for executive training." They focused on this information in order to decide which of the two opinions was correct. Then, once they had decided that one was correct and the other was incorrect, this perception of correctness had a major influence on their subsequent opinions.

Since this study utilized college undergraduates as subjects, there could be other interpretations of the results. One could argue that the reason subjects were so influenced by the opinion of the boss was because they felt unfamiliar with the management setting as it was described in the scenario. Being on unfamiliar ground, they looked for evidence from the relative "experts" in the scenario to help them form opinions. The actor in the scenario with the most prestige and influence was the boss, so it follows that subjects would be most influenced by his opinions.

When the non-profit scenario was presented to subjects, it could be further argued that this was a situation with which they felt more familiar. Many subjects may have had experience volunteering for a non-profit organization and therefore felt they had more expertise in dealing with the issue at hand. So much so, in fact, that they felt they could disagree with the national director in the matter of how to fill the position of a paid local director. They did so, and generally agreed with the

person who was not complimented by the director after stating his decision.

This would also be in line with Knight and Weiss' (1980) findings. The original study had involved a political decision. It can be argued that most people feel that they are "expert" enough to make decisions concerning politics. So in both the political and the non-profit situations, subjects based their opinions on their own reactions to the issue but in the management situation, they based their opinions on the boss' reaction to the issue.

It can also be argued that college undergraduates have had as much, if not more experience working for profit-making organizations as non-profit organizations. Most students have held part-time or summer jobs by the time they enter college. Therefore they should feel just as comfortable with either situation and base their opinions on their own reactions to the issue. If this is the case, then the argument that they were reacting to the necessity of making a profit in Study I takes precedence.

The Attributions/Perceptions->Opinions Causal Chain

A major prediction in this study was that observers' attributions for the actor's opinions and their perceptions of the actor would have a mediating effect between the consequences of the decision for the actor and their own opinions about the issue under discussion. If observers made internal attributions for the actor's opinions and perceived the actor in a positive light, then the actor would have more influence on their opinions. If observers made external attributions for the

actor's opinions and perceived the actor in a negative light, then the actor would have less influence on their opinions. In fact, this is what Knight and Weiss (1980) found in their research. The results of the current study are not as positive. In both Studies I and II, there was no support for the notion that attributions mediate the relationship between decision consequences and subjects' opinions on the issue.

The evidence that the perceptions that subjects have of an actor have a mediating influence on their opinions was not much stronger. In Study I, when the perception measures were added to the decision consequences--subjects' opinions equation, there were some significant increases in the ability to predict subjects' opinions but these effects were countered by more highly significant increases when the variables were entered in the reverse order. In Study II, t-tests revealed no significant effect of the decision consequences on any of the perception measures. Thus, there is little evidence to suggest that subjects' perceptions of the actor have a mediating effect on their opinions.

One reason for this lack of findings is apparently due to the failure of pilot testing. A series of pilot tests were run in order to remove any confounding effects caused by subjects' perceptions that one of the decisions reached was more correct the other decision. After extensive revisions, when asked which decision was correct, pilot subjects responded equally to either side no matter who received positive or negative consequences. Test subjects did not however. There was a significant bias in favor of the individuals who experienced positive consequences.

This difference between pilot and test subject responses may be due to a Type I error. The sample size for the final pilot test was 24 subjects whereas Study I utilized a total of 160 subjects. However, some of the means for the pilot sample were not in the direction that would indicate preference for the person who experienced positive consequences, so the issue did not seem to be a problem at the time.

Another possible cause for the discrepant responses between pilot and test subjects could be due to the differences in subject populations. Pilot subjects were run during summer semester, while test subjects were run during the first half of fall semester. Summer students tend to be atypical of the student population, made up of more adult students and people filling out needed credits in their curriculum. The students who sign up as experimental subjects at the beginning of fall semester tend to be highly motivated. One cannot conclude that these differences between the two samples led to the differences found in their responses, but it is a possible inference.

Gender and Sex Role

It was predicted that the interaction of the gender of the decision-makers and the consequences of their decisions would have a moderating effect on subjects' attributions, their perceptions of the actors, and their opinions on the issue that the actors discussed. These predictions were based on an extensive review of research literature in which findings of a similar nature have long been reported. However, analyses of variance did not reveal any of the predicted effects. One reason for this lack of findings may be due to the fact that the

gender of the individuals involved was not salient to subjects. This is unlikely however, since the names of the actors were clearly printed in the left-hand margin of the transcript every time they spoke (See Appendix A). This was the same method used to manipulate gender in many of the previously-cited experiments.

That subjects ignored gender could also be due to the fact that the issue of gender was not a factor upon which subjects based their decisions. When asked to evaluate the decision-makers and their decisions, subjects based their responses on the issues that were under discussion rather than the gender of the discussants. This would certainly be a positive conclusion. It would indicate that prejudices and stereotypes about the correct roles for men and women are not so strong as to influence the evaluation of decisions made by others. Since the predictions were based on previous research however, there is still the question of why there is a discrepancy between the results found in this study and the results found in published studies. One reason may be due to the "file-drawer phenomenon:" only studies that find significant differences are published; nonsignificant findings end up hidden in researchers' file-drawers. It may be that the studies where significant sex differences in attributions and evaluations are not found do not get published. The result is a trend in the research literature that indicates strong sex differences but that is not consistently found by actual research.

Another possibility for the lack of significant gender

results may be due to the fact that students may respond differently to the stimuli than actual business managers would. The expected gender bias may be present in managers but not in students. Perhaps due to different socialization processes affecting the different age groups, students do not view gender as being as important an issue as managers do. This would also be a positive conclusion, for it would indicate that socialization processes are changing for the better. Young people do not hold prejudices and stereotypes about women that are as negative as their elders. However, most of the previous research that found gender biases was performed with student samples. Besides, it is the experimenter's subjective observation that sex-role stereotypes and prejudices are alive and well among the undergraduate population on this campus.

There is always the possibility that, since students were presented with "paper people," they did not react to them in the same manner in which they would have reacted if the situation had involved live actors. Since they were asked to rate their reactions to the actors after reading a transcript of the situation, it can be argued that it would be easy for them to maintain high principles on paper and respond in a non-sexist manner. Knowing their responses were being recorded and measured by a psychologist, they could respond to the situation in a manner that was as objective and unbiased as possible. It does not necessarily follow then, that they would respond in the same manner to actual interactions between "real" men and women in the workplace. The potential for "socially correct" response bias is present in this study.

External Validity

It is a common criticism in industrial-organizational psychology that, due to the artificiality imposed on subjects in the lab, field studies have an inherently higher external validity than laboratory studies. However, an investigation of the issue (Dipboye and Flanagan, 1979) has found that field studies suffer from many of same problems that affect laboratory research, including an overuse of self-report measures, the frequent use of satisfaction as the only measure in a study, and the use of a narrow range of subjects for research. The investigators concluded that the issue of external validity is an important issue in all industrial-organizational research, not just research which takes place in laboratory settings.

The goal of the current study was to demonstrate that witnessing an individual experience certain consequences as a result of an opinion and that the context in which this takes place can have effects on the observer's own opinions on that issue. Thus, the goal was an attempt to demonstrate that a phenomenon can happen under certain conditions, rather than attempting to demonstrate that it will happen with specific populations. This is in line with Mook's (1983) discussion of research, in which he pointed out that much of laboratory research is performed not in order to investigate a specific population, but to investigate a theory. The goal of the study is not necessarily to predict behavior in real-life settings, but to predict behavior that can happen. Consequently, it is not necessary for the subject population to be representative of a given class of "real-world" people. If the study can

demonstrate that the subjects react differentially across conditions, then this may be taken as evidence that the theoretical construct does exist. This in itself should make the study worthy of consideration.

Although the predicted results were not significant, there were two significant findings in this study. The first was the mediating effect of correctness on the relationship between the decision consequences and subjects' opinions. This finding is not particularly dramatic. More than anything else, it demonstrates the lack of successfully removing the effect of correctness when pilot testing. The second significant finding was the reversal of subjects' reactions to the profit and non-profit organizations. This differential reaction to the two situations may indicate that subjects are perceiving the situations as operating under different value systems. The profit organization has an overriding value system of making the most profitable decision and the non-profit organization has an overriding value system of making the right ethical/moral decision. The subjects therefore change their responses to react appropriately to the current value system as they perceive it. This "perceived value system" qualifies as a construct that makes this laboratory study worthy of consideration.

Future Research

The next step in this line of research would be to take the materials into a field setting to investigate whether individuals in organizations respond to the stimuli in the same manner in which the student subjects did. Presenting the same materials to members of for-profit and non-profit organizations

would be a clear test of the replicability of the findings.

If similar results are found in such settings, the future research in the area of the effects of benefiting and suffering on observers should take into account these results. The fact that the type of organization in which the experience takes place can have such a strong effect on observers' perceptions shows that the perceptions are heavily influenced by the situational context of the interaction. One possible line of research might investigate further the distinctions between the for-profit and the non-profit organizations that produce such distinctly different results. Based on research done to date, it appears that the introduction of the profit motive reverses observers' perceptions of decision consequence and correctness. There might be other factors that affect these perceptions, too, such as the morality or ethics of the decision being made or the urgency of the need for a decision.

Based on the results of this study, the issue of gender differences does not seem to have a significant effect on observers' perceptions. Since previous studies have shown an effect however, researchers may wish to include gender as a variable in future studies rather than rejecting the notion on the basis of one study.

References

- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1970). Sex-role stereotypes and clinical judgements of mental health. Journal of Clinical and Consulting Psychology, 34, 1-7.
- Cash, T. F., Gillen, B., & Burns, S. (1977). Sexism and "beautyism" in personnel consultant decision making. Journal of Applied Psychology, 62, 302-310.
- Champanis, A. (1976). Engineering Psychology. In M. D. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally.
- Deaux, K. (1984). From individual differences to social categories: Analysis of a decade's research on gender. American Psychologist, 39, 105-116.
- Deaux, K., & Emswiller, T. (1974). Explanations of successful performance on sex-linked tasks: What is skill for the male is luck for the female. Journal of Personality and Social Psychology, 29, 80-85.
- Deaux, K. & Taynor, J. (1973). Evaluation of male and female ability: Bias works two ways. Psychological Reports, 32, 261-262.
- Dipboye, R. L., & Flanagan, M. F. (1979). Research settings in industrial and organizational psychology: Are findings in the field more generalizable than in the laboratory? American Psychologist, 35, 141-150.

- Eagly, A. H., & Chaiken, S. (1975). An attribution analysis of the effect of communicator characteristics on opinion change: The case for communicator attractiveness. Journal of Personality and Social Psychology, 32, 136-144.
- Eagly, A. H., Wood, W., & Chaiken, S. (1978). Causal inferences about communicators and their effect on opinion change. Journal of Personality and Social Psychology, 36, 424-435.
- Feather, N. T., & Simon, J. G. (1975). Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions, and perceived likelihood of different consequences. Journal of Personality and Social Psychology, 31, 20-31.
- Feldman-Summers, S., & Keisler, S. B. (1974). Those who are number two try harder: The effect of sex on attributions of causality. Journal of Applied Psychology, 30, 846-855.
- Harrison, E. F. (1975). The Managerial Decision-Making Process. Boston: Houghton Mifflin Company.
- Harvey, J. H., Ickes, W. J., & Kidd, R. F. (Eds.). (1976). New Directions in Attribution Research. Hillsdale, NJ: Lawrence Erlbaum.
- Harvey, J. H., & Weary, G. (1984). Current issues in attribution theory and research. Annual Review of Psychology, 35, 427-460.
- Hovland, C. I., & Weiss, W. (1952). The influence of source credibility on communication effectiveness. Public Opinion Quarterly, 15, 635-650.

- Landy, F. L., & Farr, J. L. (1983). The measurement of work performance: Methods, theory, and applications. New York, NY: Academic Press.
- Kelley, H. H. (1973). The process of causal attribution. American Psychologist, 28, 107-128.
- Kelman, H. C. & Hovland C. I. (1953). Reinstatement of the communicator in delayed measurement of opinion change. Journal of Abnormal and Social Psychology, 8, 327-335.
- Knight, P. A., & Weiss, H. M. (1980). Benefits of suffering: Communicator suffering, benefiting and influence. (Technical Report. No. 6). Purdue University. (Office of Naval Research Contract N00014-78-C-0609, NR 170-876)
- Mook, D. G., (1983). In defense of external invalidity. American Psychologist, 38, 379-387.
- Pitz, G. F. & Sachs, N. J. (1984). Judgment and decision: Theory and application. Annual Review of Psychology, 35, 139-163.
- Reno, R. (1981). Sex differences in attributions for occupational success. Journal of research in Personality, 15, 81-92.
- Rosen, B. and Jerdee, T. H. (1973). The influence of sex-role stereotypes on evaluation of male and female supervisory behavior. Journal of Applied Psychology, 57, 44-48.
- Rosen, B. & Jerdee, T. H. (1974a). Effects of applicant's sex and difficulty of job on evaluations of candidates for managerial positions. Journal of Applied Psychology, 59, 511-512.

- Rosen, B. & Jerdee, T. H. (1974b). Influence of sex-role stereotypes on personnel decisions. Journal of Applied Psychology, 59, 9-14.
- Rosen, B. and Jerdee, T. H. (1974c). Sex stereotyping in the executive suite. Harvard Business Review, 52, 45-58.
- Rosen, B. & Jerdee, T. H. (1975). Effects of applicant's sex and difficulty of job evaluations of candidates for managerial positions. Journal of Applied Psychology, 59, 511-512.
- Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. Journal of Applied Psychology, 57, 44-48.
- Schein, V. E. (1975). Relationship between sex role stereotypes and requisite management characteristics among female managers. Journal of Applied Psychology, 60, 340.
- Taynor, J., & Deaux, K. (1975). Equity and perceived sex differences: Role behavior as defined by the task, the mode, and the actor. Journal of Personality and Social Psychology, 32, 381-390.
- U.S. Bureau of Labor Statistics. (1983). Employment and earnings, monthly. Washington, D.C. U.S. Government Printing Office.
- Walster, E., Aronson, E. & Abrahams, D. (1966). On increasing the persuasiveness of a low profile communicator. Journal of Experimental Social Psychology, 2, 325-342.

Weiner, B., Prieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R. M. (1972). Perceiving the causes of success and failure. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. Morristown, NJ: General Learning Press.

Applied Technologies is a small manufacturing firm that produces computer parts for larger companies. One of their first line supervisors is about to retire and members of the personnel department have been given the task of deciding on the best method of finding a replacement.

The discussion focuses on whether they should promote one of their employees from the assembly line or by hire a supervisor from outside the company. In the end Carl, Ralph, and Kevin reach one conclusion and Mark arrives at a different solution.

The transcripts are followed by a short questionnaire concerning the topic under discussion. Please read the transcripts carefully and fill out the questionnaire.

Carl: "Well, we all managed to show up on time. What a switch, huh?"

Ralph: "Yeah, I guess the issue we have to decide on here is how to replace Harvey Johnston when he retires next January. It's complicated by the fact that we're in a tight financial situation at the moment. Bob has already emphasized the fact that making the wrong decision could cost us more money than we can afford to lose."

Mark: "What options are available to us?"

Ralph: "Well, we have two options, as I see it. One, we can hire someone from outside Allied to take his place or two, we can promote one of the workers off the line. Anybody see any other choices?"

Carl: "Yeah, we can demote one of ourselves to do the job and save the company a lot of money. Any volunteers?"

Mark: "Sure, Carl. I volunteer you. Any other ideas?"

Kevin: "Well, I prefer promoting someone on the line. I don't think someone brought in from outside the company would know enough about Allied Tech to take over Harvey's job."

Ralph: "Yeah, that's true. A supervisor who never worked here would know less about our operations than the employee working under him. We'd have to take a lot of time to familiarize him with the plant."

Mark: "It would take longer to train a line worker in supervisory skills than it would to familiarize a new person with the plant. I think we'd be better off looking for an experienced supervisor from outside the plant. There are problems with promoting our own people. Our line workers may not know enough about supervising to take over Harvey's job. They've been working as line workers for years—they don't know anything about supervising people. Just because we have someone who's a good assembler, that isn't necessarily going to make them a good supervisor. What if we did promote one of them and he wasn't any good at it? One, we lose a good assembler and two, we have a lousy supervisor. That doesn't make sense. It wouldn't be fair to the supervisor or the company."

Carl: "I dunno, Mark. I think we owe it to the workers to promote them. It's a way to reward them for loyalty to the company. Some of them have been working here since we started, you know. They've certainly earned a chance for promotion after that long. Otherwise it's a dead-end job. Promoting one of them for good work would serve as an incentive for others to do well if they see someone rewarded for good work."

Ralph: "Yeah, I'm not sure we want to bring in an outsider to start bossing the workers. Like you said, Mark, most of these people have been working on the line for years. It really wouldn't be fair to just forget them now. Maybe they're expecting a chance to get promoted here. It certainly seems like a fair reward to make one of our best workers a supervisor after all these years of loyalty."

Kevin: "Yeah, I like the idea of having an incentive for the workers."

Mark: "But it's a false incentive! The only reason this job is opening up is because Harvey is retiring. All the workers can't expect to move into management. Anyway, you guys have to realize, he may not even want the job. He'd have to start bossing around all those guys who're his friends. I mean, those guys go drinking every Friday and they hang out together. How's he gonna feel if all the sudden he's bossing his friends? How're his friends gonna feel? No one'll like it! It'll break up friendships! I think it would create a lot of friction if we start singling out one employee for promotion over others."

Carl: "But we should be rewarding good work with promotion!"

Mark: "But don't forget, we're supposed to base our decision on the economics of the situation. The company can't afford to make the wrong decision. If we really want to do this right and hire the best possible person for the job, we need to review as many potential candidates as possible. The wider range of candidates we have, the more likely we'll be able to fill the position with the best person for the job, right? Well, the way to do that is to advertise the position and let people with management experience apply for it. We shouldn't just restrict ourselves to the population of sixty-two people we have working on the line. That's not the way to get the most qualified person."

Kevin: "Picking someone who doesn't know anything about the company won't necessarily be the most economical decision, especially if we have a lot of unhappy workers as a result. Besides, you make it sound like it'd be unfair to someone to promote them for doing a good job! It seems fair enough to me. What could be wrong with that? If you want to talk about fairness, how fair is it to bring in an outsider, who has never even worked for this company, and ask our employees to start taking orders from him? Now that's not fair! You know, if we do bring in this person from outside, that means the workers will know they can never look forward to any promotion. What'll that do for morale?"

Mark: "I really think that if we want to get the best person for the job, we have to open the position up to skilled supervisors outside of Allied Tech. We can't restrict ourselves to just the limited number of employees we have available at Allied. I'm not sure we'd find the best person for the job from within the company and I think we'd create more problems than we'd solve."

Ralph: "Sorry Mark, but I just can't agree with you. In order to be fair to our employees we should promote one of our best workers off the line. It'd be much better for morale."

Kevin: "We have to reach a decision. Personally, I agree with Ralph. I think the employees deserve to be promoted for good work."

Carl: "Me, too."

Ralph: "Well, it looks like we've reached a decision Mark, what do you think?"

Mark: "You can take that position to Bob if you want, but I can't agree with it. I guess I'll have to state a minority opinion. I really think it would be unfair to our employees to single out a worker for promotion. Besides, we have such a much broader range of talent if we go outside the company. You make a formal statement and then I'll add my opinion on afterwards."

The group must give their decision to the company president so they have it typed up. First the majority opinion is outlined, then the dissenting opinion follows. Just as they receive the finished copy, the company president arrives. He takes a minute to read over the two decisions, then he says,

"I don't know about the group's arguments, but Mark has raised some issues that I hadn't even thought of before. I really admire the creativity that went into them. They're obviously the product of an active mind. Of course, I'll have to think about it some more before I decide which choice is the correct decision. This is a very sensitive and complicated issue."

"You know, I was just thinking about who I should send to that island retreat for executive training. I think that Mark would make a very good candidate! I really don't know about the rest of you though. I'm not sure that any of you have shown executive quality yet."

He shakes his head as he leaves the room.

Applied Technologies is a small manufacturing firm that produces computer parts for larger companies. One of their first line supervisors is about to retire and members of the personnel department have been given the task of deciding on the best method of finding a replacement.

The discussion focuses on whether they should promote one of their employees from the assembly line or by hire a supervisor from outside the company. In the end Carol, Ruth, and Karen reach one conclusion and Marcia arrives at a different solution.

The transcripts are followed by a short questionnaire concerning the topic under discussion. Please read the transcripts carefully and fill out the questionnaire.

Carol: "Well, we all managed to show up on time. What a switch, huh?"

Ruth: "Yeah, I guess the issue we have to decide on here is how to replace Harvey Johnston when he retires next January. It's complicated by the fact that we're in a tight financial situation at the moment. Bob has already emphasized the fact that making the wrong decision could cost us more money than we can afford to lose."

Marcia: "What options are available to us?"

Ruth: "Well, we have two options, as I see it. One, we can hire someone from outside Allied to take his place or two, we can promote one of the workers off the line. Anybody see any other choices?"

Carol: "Yeah, we can demote one of ourselves to do the job and save the company a lot of money. Any volunteers?"

Marcia: "Sure, Carol. I volunteer you. Any other ideas?"

Karen: "Well, I prefer hiring someone from outside the company. I don't think any of our line workers know enough about supervising to take over Harvey's job."

Ruth: "Yeah, that's true. Most of the people have been working on the line for years. They don't know anything about supervising people—how to get them to do what you want."

Marcia: "Well, wait a minute now. I think it'd be better to promote one of our own workers to that position. Do you really want to bring in an outsider to start bossing them around? Like you said, Ruth, most of those people have been working on the line for years. It wouldn't be fair to just forget about them now. Maybe they're expecting a chance to get promoted here. It certainly seems like a fair reward to make one of our best workers a supervisor after years of loyalty."

Carol: "I dunno, Marcia. None of those line workers knows a thing about supervising. I really think we need a professional with management experience in there. The company can't afford to have the place go downhill due to poor supervising."

- Ruth: "Yeah, the problem I have with using one of our own workers is the fact that just because a given worker is an excellent assembler isn't necessarily going to make him a good supervisor. Look, what if we put him in as supervisor and it turns out he isn't any good at it? One, we lose a good assembler, and two, we have a lousy supervisor. That doesn't make sense. It wouldn't be fair to the worker or the company."
- Karen: "Not only that, but he may not want the job. He'd have to suddenly start bossing all those guys who're his friends. I mean, those guys go out drinking every Friday and they hang out together. How's he gonna feel if all the sudden he's bossing his friends? How're his friends gonna feel? No one'll like it! It'll break up friendships!"
- Marcia: "You make it sound like it'd be unfair to someone to promote them for doing a good job! It seems fair enough to me that, after putting in years of loyal service, our workers could expect to find a possibility of promotion into management. What could be wrong with that? If you want to talk about fairness, how fair is it to bring in an outsider, who has never even worked for this company, and ask our employees to start taking orders from him? Now that's not fair!"
- Carol: "This is more than an issue of fairness, Marcia. We have to do what will help the company the most. It wouldn't help anybody if we went out of business."
- Marcia: "There's another reason for looking to our own employees for a supervisor. They all know this company inside and out. If we brought in someone, we'd have to spend a lot of time just familiarizing them with all the complexities of this crazy plant of ours. The workers would know more about operations than their own supervisor!"
- Karen: "Well, speaking of the time it'd take to train the supervisor, how about the time it'd take to train one of our line workers in supervisory skills? I think it'd take longer than familiarizing an outsider with the plant."
- Ruth: "Me too—a lot longer. Don't forget, we're supposed to base our decision on the economics of the situation. The company can't afford to make the wrong decision. If we really want to do this right and hire the best possible person for the job, we need to review as many potential candidates as possible. The wider range of candidates we have, the more likely we'll be able to fill the position with the best person for the job, right? Well, the way to do that is to advertise the position and let people with management experience apply for it. We shouldn't just restrict ourselves to the population of sixty-two people we have working on the line. That's not the way to get the most qualified person."
- Marcia: "Yeah, but I'm not sure we want to bring in an outsider to start bossing the workers. They should have their own chance to become supervisors. If we never promote any of them, then we'll create a two-class system here; the management and the workers. That'll just

cause friction and hurt the company in the long run."

Ruth: "Sorry Marcia, but I just can't agree with you. In order to make the best economical decision and get the best person for the job, we need to open up the position to skilled supervisors outside of Allied Tech. We can't restrict ourselves to just a few employees."

Karen: "Well, we have to reach a decision. Personally, I agree with Ruth. I think we'll get the most qualified person outside the plant. This place just isn't that large and besides, as Bob told us, we can't afford to make mistakes."

Carol: "Me, too."

Ruth: "Well, it looks like we've reached a decision Marcia, what do you think?"

Marcia: "You can take that position to Bob if you want, but I can't agree with it. I guess I'll have to state a minority opinion. I really think it would be bad for the workers and the company not to give them an opportunity to get promoted into a management position as a reward for good work."

Ruth: "Okay, Marcia. We'll make a formal statement and then you can add your opinion on at the end."

The group must give their decision to the company president so they have it typed up. First the majority opinion is outlined, then the dissenting opinion follows. Just as they receive the finished copy, the company president arrives. He takes a minute to read over the two decisions, then he says,

"I don't know about Marcia's arguments, but the group has raised some issues that I hadn't even thought of before. I really admire the creativity that went into them. They're obviously the product of active minds. Of course, I'll have to think about it some more before I decide which choice is the correct decision. This is a very sensitive and complicated issue."

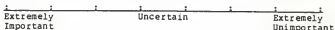
"You know, I was just thinking about who I should send to that island retreat for executive training. I think that all of you would make very good candidates! I really don't know about Marcia though. I'm not sure that you have shown executive quality yet."

He shakes his head as he leaves the room.

Appendix C: Attribution Scale

The following questions are about the individual who disagreed with the rest of the group. HOW IMPORTANT do you think each of the following factors was in INFLUENCING HER OPINION? Place a mark (X) at the point along the scale which best corresponds to your opinion.

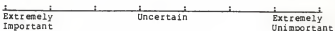
1. The individual's concern for finding a quality supervisor.



2. The potential for the individual to personally benefit from making the decision.



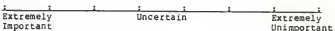
3. The individual's concern about the company's success.



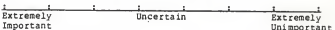
4. A negative attitude toward the group.



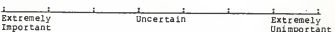
5. The need to minimize resentment among workers.



6. The individual's desire to promote her own career.



7. The individual's own values and beliefs about quality supervisors.



8. The chance that the individual might be rewarded for doing what the boss wants.



1.	Honest	Dishonest
2.	Insincere	Sincere
3.	Nonopportunistic	Opportunistic
4.	Intelligent	Unintelligent
5.	Close minded	Open minded
6.	Compliant	Independent
7.	Unbiased	Biased
8.	Principled	Unprincipled
9.	Not likeable	Likeable
10.	Trustworthy	Untrustworthy
11.	Non-manipulative	Manipulative
12.	Inconsistent	Consistent
13.	Selfish	Selfless
14.	Afraid	Unafraid
15.	Committed	Uncommitted

Appendix E: Opinion Scale

Based on the transcripts you have just read, please respond to the following questions. Place an X at the point along the line between the dots that best represents your reaction. 98

1. Rate the strength of the arguments for hiring from outside.

Excellent Good Fair Okay Poor Bad Terrible

2. Rate the strength of the arguments for promoting from within.

Excellent Good Fair Okay Poor Bad Terrible

3. Which side presented the better argument?

Hire from Outside Equal Arguments Promote from Within

4. What argument convinced you to make that choice?

5. If you had to make the decision, which choice would you make?

____ Promote from Within

____ Hire from Outside

____ Neither

Explain

6. Do you think the group made the correct decision?

☐ Yes ☐ No

7. Do you think the individual made the correct decision?

☐ Yes ☐ No

8. Do you think the group experienced any bad results for themselves after making their decision?

☐ Yes ☐ No Why?

9. Do you think the individual experienced any bad results for herself after making her decision?

☐ Yes ☐ No Why?

10. Do you think the individual was rewarded for making her decision?

☐ Yes ☐ No Why?

11. Do you think the group was rewarded for making their decision?

☐ Yes ☐ No Why?

12. Do you think the group experienced any good results for themselves after making their decision?

☐ Yes ☐ No Why?

13. Do you think the individual experienced any good results for herself after making her decision?

☐ Yes ☐ No Why?

14. Do you think the group was punished for their decision?

☐ Yes ☐ No Why?

15. Do you think the individual was punished for her decision?

☐ Yes ☐ No Why?

Food for the Children is a nation-wide volunteer organization that is dedicated to supplying food and care to starving children in underdeveloped countries. One of their paid local directors is about to retire and a committee at the national level have been given the task of deciding on the best method of finding a replacement.

The discussion focuses on whether they should promote one of the people from their group of local volunteers or hire a director from outside the organization. In the end Carl, Ralph, and Kevin reach one conclusion and Mark arrives at a different solution.

The transcripts are followed by a short questionnaire concerning the topic under discussion. Please read the transcripts carefully and fill out the questionnaire.

Carl: "Well, we all managed to show up on time. What a switch, huh?"

Ralph: "Yeah, I guess the issue we have to decide on here is how to replace Harvey Johnston when he retires next January. It's complicated by the fact that we're in a tight financial situation at the moment. Bob has already emphasized the fact that making the wrong decision could cost us more money than we can afford to lose."

Mark: "What options are available to us?"

Ralph: "Well, we have two options, as I see it. One, we can hire someone from outside Food for the Children to take his place or two, we can promote one of the local volunteers. Anybody see any other choices?"

Carl: "Yeah, we can demote one of ourselves to do the job and save the organization a lot of money. Any volunteers?"

Mark: "Sure, Carl. I volunteer you. Any other ideas?"

Kevin: "Well, I prefer promoting a local volunteer. I don't think someone brought in from outside the organization would know enough about Food for the Children to take over Harvey's job."

Ralph: "Yeah, that's true. A director who never worked here would know less about our operations than the volunteer working under him. We'd have to take a lot of time to familiarize him with the organization."

Mark: "It would take longer to train a volunteer in organizational skills than it would to familiarize a new person with the organization. I think we'd be better off looking for an experienced director from outside the organization. There are problems with promoting our own people. Our volunteers may not know enough about running an organization to take over Harvey's job. They've been working as volunteers for years—they don't know anything about supervising people. Just because we have someone who's a reliable volunteer, that isn't necessarily going to make them a good director. What if we did promote one of them and he wasn't any good at it? One, we lose a good volunteer and two, we have a lousy director. That

doesn't make sense. It wouldn't be fair to the director or the organization."

101

Carl: "I dunno, Mark. I think we owe it to the volunteers to promote them. It's a way to reward them for loyalty to the organization. Some of them have been working with us since we started, you know. They've certainly earned a chance for promotion after that long. Otherwise it's a dead-end situation. Promoting one of them for good work would serve as an incentive for others to do well if they see someone rewarded for good work."

Ralph: "Yeah, I'm not sure we want to bring in an outsider to start bossing the volunteers. Like you said, Mark, most of these people have been working in the field for years. It really wouldn't be fair to just forget them now. Maybe they're expecting a chance to get promoted here. It certainly seems like a fair reward to make one of our most reliable volunteers a supervisor after all these years of loyalty."

Kevin: "Yeah, I like the idea of having an incentive for the other volunteers."

Mark: "But it's a false incentive! The only reason this job is opening up is because Harvey is retiring. All the volunteers can't expect to move into a paid position. Anyway, you guys have to realize, he may not even want the job. He'd have to start directing all those guys who're his friends. I mean, those guys go drinking every Friday and they hang out together. How's he gonna feel if all the sudden he's bossing his friends? How're his friends gonna feel? No one'll like it! It'll break up friendships! I think it would create a lot of friction if we start singling out one volunteer for promotion over others."

Carl: "But we should be rewarding good work with promotion!"

Mark: "But don't forget, we're supposed to base our decision on the economics of the situation. The organization can't afford to make the wrong decision. If we really want to do this right and hire the best possible person for the job, we need to review as many potential candidates as possible. The wider range of candidates we have, the more likely we'll be able to fill the position with the best person for the job, right? Well, the way to do that is to advertise the position and let people with management experience apply for it. We shouldn't just restrict ourselves to the population of sixty-two people we have working in the field. That's not the way to get the most qualified person."

Kevin: "Picking someone who doesn't know anything about the organization won't necessarily be the most economical decision, especially if we have a lot of unhappy volunteers as a result. Besides, you make it sound like it'd be unfair to someone to promote them for doing a good job! It seems fair enough to me. What could be wrong with that? If you want to talk about fairness, how fair is it to bring in an outsider, who has never even worked for this organization, and ask our volunteers to start taking orders from him? Now that's not fair! You know, if we do bring in this person from outside, that means the

volunteers will know they can never look forward to any promotion. What'll that do for morale?"

102

Mark: "I really think that if we want to get the best person for the job, we have to open the position up to skilled supervisors outside of Food for the Children. We can't restrict ourselves to just the limited number of volunteers we have available in Food for the Children. I'm not sure we'd find the best person for the job from within the organization and I think we'd create more problems than we'd solve."

Ralph: "Sorry Mark, but I just can't agree with you. In order to be fair to our volunteers we should promote one of our most reliable people locally. It'd be much better for morale."

Kevin: "We have to reach a decision. Personally, I agree with Ralph. I think the volunteers deserve to be promoted for good work."

Carl: "Me, too."

Ralph: "Well, it looks like we've reached a decision Mark, what do you think?"

Mark: "You can take that position to Bob if you want, but I can't agree with it. I guess I'll have to state a minority opinion. I really think it would be unfair to our volunteers to single out one person for promotion. Besides, we have such a much broader range of talent if we go outside the organization. You make a formal statement and then I'll add my opinion on afterwards."

The group must give their decision to the national director so they have it typed up. First the majority opinion is outlined, then the dissenting opinion follows. Just as they receive the finished copy, the national director arrives. He takes a minute to read over the two decisions, then he says,

"I don't know about Mark's arguments, but the group has raised some issues that I hadn't even thought of before. I really admire the creativity that went into them. They're obviously the product of active minds. Of course, I'll have to think about it some more before I decide which choice is the correct decision. This is a very sensitive and complicated issue."

"You know, I was just thinking about who I should send to that island retreat for executive training. I think that all of you would make very good candidates! I really don't know about Mark though. I'm not sure that you have shown executive quality yet."

He shakes his head as he leaves the room.

INDIVIDUAL AND GROUP GENDER: MODERATORS FOR
ATTRIBUTIONS, PERCEPTIONS, AND OPINIONS

by

GUY CHARLES BALTZELLE

B. S., University of Washington, 1980

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Psychology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1985

This study examined the effects of communicator gender, group gender, and the consequences of the communication (benefiting/suffering) on the perceptions, attributions, and resulting opinions made by observers.

Subjects were presented with the transcript of a conversation between four people in a simulated management setting. The discussion revolved around whether the company should hire a new supervisor from outside the organization or promote an employee from within the organization to fill the position. When they concluded, three group members agreed on one solution and the fourth group member reached a different solution. When the company president looked it over, he either praised the individual (target person) for his/her creativity and denigrated the group of three, or he praised the group for their creativity and denigrated the target person. This constituted the decision consequences manipulation. The group gender was manipulated by having either three males reach one conclusion or three females. The gender of the target person was also varied across all conditions.

After the subjects read the transcript, their perceptions of the target person, their attributions for his/her opinion, and their opinion on the issue were all measured by questionnaire.

The results showed that ~~the~~ neither the gender of the target person, nor the gender of the group members had a significant effect on subjects' perceptions of the target person, their attributions for his/her opinion, or their own opinion on the issue. Instead, the issue of whether the decision was correct

accounted for most of the effects on subjects' opinions. Those who experienced positive consequences were rated as being correct and had a subsequent influence on subjects' opinions. Those who experienced negative consequences were rated as being incorrect and had no influence on subjects' opinions. When the setting was changed from business management to a non-profit organization the opposite results were found. Those who experienced positive consequences were seen as being incorrect and had no influence on subjects' opinions. Those who experienced negative consequences were seen as being correct and had a subsequent influence on subjects' opinions. Results were discussed in terms of the effects of profit motive on subjects' attributions and perceptions.